

California State Journal of Medicine.

Published Monthly by the
Medical Society of the State of California

PUBLICATION COMMITTEE

PHILIP MILLS JONES, M. D., Chairman and Editor

GEORGE H. EVANS, M. D.

G. F. REINHARDT, M. D.

C. D. McGETTIGAN, M. D.

HARRY M. SHERMAN, M. D.

JOHN J. HARRISON

Business Manager

Members of the Society are requested to promptly notify the publication office of change of address, in order that mailing list may be corrected. Secretaries of County Societies are also requested to notify the "Journal" of deaths, removals, etc., and send in names of new members and their postoffice address.

Communications on subjects of interest to the profession are invited. The "Journal" is not responsible for the views advanced by correspondents. Address letters relating to the "Journal" to the publication office, 31 Post Street, San Francisco.

Subscription price to non-members of California affiliated county medical societies, \$3.00 per year, in advance; single copies, 25 cents. Subscriptions may be sent to publication office, 31 Post St., San Francisco, or to the San Francisco News Co., 342 Geary St., or any of its agents.

NOVEMBER, 1903.

EDITORIAL NOTES.

To the Members of the Oregon State Medical Society, Greeting! The Publication Committee takes much pleasure in handing you herewith a copy of this number of the JOURNAL. On page 368, et seq., you will find a full report of the meeting of your State Society, which we trust will meet with your approval. You extended to our representative a cordial and kindly reception, and we hope that you will permit us to have the pleasure of returning this courtesy, in some measure, at the meeting of our State Society next April, at Paso Robles. The Trustees of our Society extend to you, one and all, a hearty invitation to come to the meeting of our Society and to consider yourselves as welcome as are our own members; to discuss with us the papers and matters presented, and to meet your fellow-physicians who have to live a little farther south on our Pacific Coast. We ask you to study the JOURNAL carefully. It is published by the State Society and it has no outside or inside, personal or commercial, biased control; it stands for the profession of medicine and for organization of that profession. In California we have found that it is regarded with favor and that to its account may be credited much of the great development of the spirit of organization and of the increase in the ranks of the organized. We think that through it you can materially lighten the work of organization in your State, if you desire to do so. We are will-

ing to aid you and to coöperate with you in this work, and if you desire to make the JOURNAL your journal, to have it your official mouthpiece, the means of communication between your members, the record of your component society proceedings, we are willing to help you. It might as well be the journal of two or of three State societies as of one alone; especially when the states are so near together and so similarly situated, relatively to the rest of the United States, as are we of the Pacific Coast. We are willing to share the JOURNAL with you; to make it as much your journal as it is ours; to devote its energies to the work of organization in Oregon as well as to that work in California; to send it to your members just as it is sent to our own. As the JOURNAL is not private property, was not founded and will not be operated for the financial profit of any individuals, nor of the Society, we have no embarrassment in extending to you this proffered aid. Sturdy union can do much; close organization and cordial coöperation can work wonders; and we feel that the time has come when but one sentiment should prevail in the hearts and minds of all practitioners of medicine—harmony, coöperation, organization.

Like many other things in life, the prosecution and conviction of illegal practitioners is not difficult if it is done right. The Board of Examiners has spent considerable time and money in finding out how to do it

ILLEGAL PRACTITIONERS

right and has systematized the work. All suits against illegal practitioners should be brought in the name of the Board; the Board is erected by law for the purpose of guarding the public against these birds of prey, and hence it is the duty of the Board to prosecute. In this we, as a Society, can be of the very greatest aid to the Board. If our members individually will send in word as to the existence and location of quacks, the Board will then assist the local society in bringing the suit, getting the evidence, etc., and will forward full details as to the proper procedure and the best manner of conducting the suit. It looks like a simple matter, and in reality it is; the main difficulty lies in the fact that most judges and justices of the peace are lamentably ignorant of the medical law and its interpretation. The same thing can be said of most attorneys who have not carefully studied out the question and had some experience with it. The Board has worked out these details and its attorneys have well outlined the whole course of procedure. This information is available at any time and will be at the service of any county society wishing to rid its vicinity of quacks. If your county society is loath to move, why do not you as an individual take the matter up? The Board will gladly help you, and the work should be done.

The attention of our readers generally, but of the Committee on Legislation in particular, is earnestly called to an editorial in the *Journal of the American Medical Association* of July 4, entitled "A Law Against Nasty Advertising in Michigan." An amendment was added to the new Michigan Medical Practice Act authorizing "the Board of Registration in Medicine to revoke the certificate, after due notice and hearing, of any registered practitioner, who inserts advertisements in newspapers, pamphlets, circulars, or other written or printed paper relative to venereal disease or other matter of an obscene or offensive nature derogatory to good morals." This amendment was made possible because of the thorough organization of the medical profession in Michigan. It was actually aided by one or two newspapers! The *Detroit Journal* has for some time refused to receive quack advertisements. This is a worthy amendment and one which should be enacted by all State legislatures, for it attacks what the *Journal* aptly calls the greatest curse of our profession. What has been accomplished in Michigan can also be accomplished in California and other states if committees on legislation will do their duty. Too often the only work done by such committees is to make an annual report to their society of the work done, or attempted, during the year—by others. The Committee on Legislation of the American Medical Association is at present forming an Auxiliary National Committee with representation in every county medical society. Here is work for these committeemen. If each of these men will enter into this work with an earnest purpose to do his duty, such an amendment can be enacted by our next Legislature. A great deal of assistance can incidentally be rendered by the Committee on Legislation of our State Society.

Committees are proverbially slow to get to work and to do that which they are appointed to do; this is especially true of committees of the "standing" variety. What is everybody's business is nobody's business.

County societies should be particularly careful in the selection of committees on admissions, or committees of investigation, and should see that men who will do their duty are placed on such committees. When an application for membership is placed before a society it should be acted upon with as little delay as the organic law of the society permits. There is no excuse for holding an application over for two, three or four meetings (an actual experience reported to the *JOURNAL*) without any action—all because the proper committee has not reported. When men accept such positions they should do so with the clear understanding that the honor carries with

it some responsibility, some work to do, and they should see to it that they do their duty. Too long has the idea maintained that an office in a medical society is a delicately conferred compliment. If we are ever to lift ourselves out of the slough, to clean ourselves up and do the things that we ought to, each and every officer in each and every component society will have to awaken to the fact that there is something for him to do—in addition to making a nice little speech of acceptance of the honor conferred upon him. The only way to get anything done is to do it; the only way for us to build up and strengthen our organization is for every man to do what he agreed to when he accepted an office.

One very important asset of complete organization of the medical profession is the ability to get rid of illegal practitioners.

ORGANIZATION AND THE QUACK The illegal practitioner thrives well, when let alone, and is a menace to the community upon which he preys. If he has a degree and will not take an examination for a license, it is because he knows his own ignorance and fears the result; if he has no degree he is even one stage worse in the class of fakers. In either event he should be removed. One great object of organization is to locate first, and then get rid of, these quacks. It can easily be done when all reputable practitioners unite, point out the illegal ones, and then cooperate in their removal. This work should properly be in the hands and under the direction of the Board of Medical Examiners, and it is a pleasure to note that the Board is doing all it can under the circumstances to prosecute these gentry. But every member of the Society should help in the work. Each member who knows of an illegal practitioner or one whose license is not on record, should at once notify the Board of Examiners. Please send such names either to the President of the Board, Dr. Dudley Tait, 1054 Post Street, San Francisco; Dr. George G. Gere, Secretary of the Board, Parrott Building, San Francisco, or to this office. The *JOURNAL* will be glad to forward such names to the Board.

In accordance with the instructions of the last House of Delegates, the Board of Trustees has actively undertaken the work of organization of county societies in counties where they do not exist. During the months of September and October three such county societies were brought into life, and arrangements have been made for organizing several others. We desire to appeal to every member of the Society for aid in this work. Surely each one knows someone, either in his own county or in some other, who is not a member of a county society. If your friend lives in a county where there is

no county society, will you not ask him to write to this office for information and assistance in forming one? Or, if there are but few physicians in his county, will you not ask him to join the society of the nearest county? And lastly, will you not ask your friend, in the same county with you, to join your own county society? If you have no friend who is not a member of your county society, ask one who is not your friend, if such there be, for he certainly ought to be both your friend and a member of his county society. There is no single thing that hurts all parties to the quarrel so much as a fight among medical men. The Society is growing rapidly, but it should grow even more rapidly, and it should continue to grow until every reputable physician in the State is enrolled on the lists of county medical societies.

The JOURNAL is pleased to acknowledge the receipt of a communication from the secretary of the New York State Medical Association, inclosing sundry documents. These pertain

THE PROFESSION IN NEW YORK

to the matter of an amalgamation of the State Society and Association, or rather to the steps being taken to secure this union. The Society, noting that the obsequies of the "Code of Ethics" were properly celebrated at New Orleans, suggests that its committee on conference meet a similar committee from the Association once more, and see what may be done in view of the altered condition of things. The Association, no longer painfully hampered and constrained by the archaic document which it has so long and so ardently cherished and tended, has, through a special meeting of its council called for the purpose, resolved that a committee of five be appointed, and "said committee is hereby empowered to do whatever is necessary and expedient to bring about such a union in a just and equitable manner." The Society says: "The committee asks for careful deliberation in conference that both the Society and the Association may in the near future be able to present completed and satisfactory plans to the state bodies for ratification." This is certainly the best of good news, but one could hardly be blamed, should he wonder: "Will there be more exchange of frigidly polite correspondence, or will something actually be done to which I may say, Amen; God be praised?"

The JOURNAL is very jealous of the good name of California and of its physicians. We do not like to see the names of California physicians tacked onto the endorsements of various preparations, and especially we dislike to see the names of fictitious persons, located in California by the imaginative "ad-smith," as

the modern advertisement writer has come to be called. Several such infractions of what we are pleased to consider good taste, if nothing more, have come to the attention of the JOURNAL and have been noted in its pages. One eye, at least, will always be devoted to watching the advertising pages of medical journals and will not overlook, we confidently believe, these errors of commission. The JOURNAL does not desire to attack anyone or to say hard things about anyone; but it does believe in living first and foremost for the truth and for decency. Those concerns that need endorsements from California physicians had best make sure that they get good ones and actually living authors, or do without. The JOURNAL stands for every reputable physician in California and will do its best to see that they are protected in their good names as well as in other things.

TRUTH

When the den of the biggest "get-rich-quick operator," as he was called by the press, was raided in New York, the fact was disclosed that by far the greater portion of his "clients" were drawn from the professions of medicine and theology; doctors and ministers were easy game. For a generation or two we physicians have been complacent; we have been good natured and lazy; and we have been very credulous. Two important items are printed in this number of the JOURNAL, and they bear directly upon this question. One is a letter from a well-known physician of this State, and the other is an extract from an address delivered by Dr. Beard. True, the address was directed to a pharmaceutical association, but it applies largely to the medical profession as well, and its truths hit us pretty hard. Some months ago we published an editorial note entitled "Pharmacy and Medicine" (page 251) which has been reprinted in a score of medical and pharmaceutical journals, we are very glad to note. It dealt with this question of divided responsibility in the matter of increase in "ready made medicine," and the retrogressive process undergoing in pharmacy. We are directly to blame for much of the present condition of things. Many of us read the statements made by the advertisers of the new and generally secret formula proprietary preparations, or the cheap synthetic German chemicals (absolutely controlled) that flood the country, and we believe what we read or what we are told by the interested parties. We do not stop to think; we do not demand facts instead of statements; we do not know that it is very easy to buy all sorts of endorsements, or to "fake" them if they cannot be bought. We have allowed ourselves and our profession to be used and prostituted in the exploitation of the business of manufacturing unknown stuff into medicine; the business of gam-

QUESTIONABLE ENDORSEMENTS

bling with death; the business of getting blood-money for the man who cares not a whit for the blood upon it or the lives it represents. Should we not be a little ashamed of ourselves? Is it not time that we looked to our duty and to our own self-respect? There is no argument under heaven that can be used to support the employment of any drug or chemical, the exact physiologic action of which is unknown; there is absolutely no argument that can support the administration of any "secret proprietary" preparation, or one the actual ingredients of which the physician is in ignorance. There are honest manufacturers of pharmaceuticals, and there are good honest preparations—not secret. But, unfortunately, conditions are such as to make it almost impossible for us to hit the unscrupulous and the dishonest without doing some injury to the honest. It is as much their fault as it is ours, for they could do much service in cleaning up the stable, if they would but exert themselves. Our fault lies largely in our dense ignorance of what it is our sworn duty to know—the nature of and the facts concerning the materials which we use and prescribe. It is a conservative statement to say that not one physician in a thousand, the country over, knows that there are six different brands, under six controlled names, of course, for one simple chemical—hexamethylene-tetramin (JOURNAL, page 312). The editor has been criticized for devoting much space to this subject; but the criticism has come from those who were and are in absolute ignorance of the facts and the deplorable condition in which medicine has been placed by these generations of complacent credulity. This question is regarded by the deep-thinking men of the profession as the very most important question in medicine. Such men as Osler, Beard, Wiley, Wilcox, and scores of others, have uttered the strongest words of warning. Every statement here published, and every statement that has been published in the JOURNAL on this subject, is absolutely true and cannot be even disputed, let alone denied. If they are true, if the matter is so important, is it not our simple and plain duty, irrespective of what anyone else or any other journal may say, to clear away some of these noxious weeds that have been permitted to grow up in the field of medicine, and to let in a little of the good health-giving light? Let us, as a profession, strive hard to get away from our turpitude; to cease to be so wretchedly gullible.

THE CITY AND COUNTY HOSPITAL.

At the recent general vote on the question of the issuance of bonds for certain civic improvements, it was voted to issue bonds for three-quarters of a million dollars for the erection of a new City and County Hospital. The ballot specified that the hospital was to be built in the City and County of San Francisco; but the ordinance

passed by the Supervisors in June, 1902, which called for this vote, stated that the hospital was to be built on a parcel of land set off from the Alms House Tract. Inquiry by the JOURNAL shows that this binds the matter—the ordinance called for a vote for the issuance of bonds for the building of the hospital in a certain place.

The bonds have been voted; the hospital must therefore be built on that site. This is a fact greatly to be regretted. The particular parcel of land is the best unoccupied part of the Alms House Tract; but it is far from the city and it is up-hill to get there; moreover, the land itself is sloping, and much expensive grading will need to be done; finally, and this is the chief objection, and the one which cannot be overcome, the site is exposed to the winds and fogs from the Pacific Ocean and is not a salubrious place for a large part of the patients who have to seek relief in the hospital. The selection of this site was practically compelled by the residents of the Mission districts of the city. They very rightly considered that the old City and County Hospital, not an impressive architectural scheme in the beginning, and now a shabby lot of shanties, depreciated the value of their surrounding properties. But in ridding themselves of the old buildings they have sent the institution so far away that some sort of a boomerang must be expected. And it will very likely come in this way—the new institution will be built and the old abandoned. The new one will, because of its distance, be inaccessible for a certain class of acute surgical classes, and, because of its weather, be inappropriate for a class of chronic medical cases. Moreover, the new one will be quickly filled, for it is not planned to accommodate the number of probable applicants, if these increase at the present ratio. For these two classes, and the overflow, other arrangements will need to be made, and the site that will be selected for these arrangements will be the present one of the hospital. This cannot be otherwise; the present site is acknowledged to be in a salubrious part of the city, free from wind and fog, and it is, moreover, accessible to patients. What the Mission residents have to fear is that, in a reaction of economy, the old buildings shall be continued and used. What they will have to work for will be more bonds for a new group of buildings. Once they are built these Mission residents will find that their property is not materially harmed by them, for the deteriorating influence of a proper set of buildings surrounded by well laid-out grounds is *nil*, and the world is quickly coming to the opinion that disease under hygienic and sanitary control is safe in almost any part of a large city.

There are now two steps to be taken before the money can be realized on the bonds: The Supreme Court of California must review the whole proceeding and say that the bonds have been

properly and legally voted. Then bankers or buyers must be found to take the bonds. These processes will require about a year, and in them the JOURNAL has no particular interest.

Meanwhile, the plans are being prepared by the Board of Public Works. A representative of the JOURNAL has seen them and has thoroughly agreed in the modifications of the ideas dominating the initial set of plans. The two-story pavilion scheme gives place to a three or four-story scheme, the floors to be connected by modern passenger elevators. There is no more reason why sick people should not be in a fourth, fifth, or tenth story of a modern fireproof building than there is why well people should not be there. Surely those who have experienced and appreciated the peace and quiet, the fresh air and sunshine of the upper stories of a modern hotel, are going to understand the reason for building up,

rather than for building out sideways. On the economic side there is also a reason, for the number of roofs originally planned can be lessened and the number of beds under them increased, without increase of cost for building. In all the interior arrangements the most modern methods must be followed. Every room or ward must be supplied with hot and cold water for washing and drinking, and steam for heating, and with electricity for lighting. There should not be the need of a single fire in any of the buildings occupied by patients. Even the nurses' ward kitchens should have no gas stoves, but live steam should be used for their cooking. It is not just yet time to go into all the details, but the JOURNAL promises that sketches and floor plans shall be published and ample opportunity be given for a full discussion of the question by the profession.

TUBERCULOUS INFECTION OF THE PERITONEUM AND ADNEXA.*

By ANDREW STEWART LOBINGIER, A. B., M. D., Los Angeles.

THE fact that tuberculosis of the peritoneum and of the appendages are so frequently associated makes their combined study a logical one.

Veit, (1) in his address delivered at the last International Congress of Gynecology, declared peritoneal tuberculosis to be always a secondary infection, whereas genital involvement may be either primary or secondary. Martin (2) thinks genital tuberculosis is far commoner among women than is generally believed. Whenever we find inflammatory disturbances in the uterus or appendages, in a tuberculous subject, we should be suspicious of genital tuberculosis. He believes the appendages are affected from the intestines through the glands or peritoneum, or through the blood current. Borschke (3) found in 1393 subjects of tuberculosis brought to autopsy, 226 in which the peritoneum was affected. Of this number in only two could it be affirmed that the peritoneum was the primary focus of infection. Borschke's study demonstrated the large majority of infections to arise from the bronchial glands, lungs and pleura. Amann (4) also is of the belief that the bronchial glands are the primary site of infection and from these the lungs, pleura, peritoneum and appendages, are secondarily involved. He affirms with a rash positivism that a primary tuberculous lesion of the appendages, uterus or vagina has never yet been seen, and cites in support the statements of certain celebrated pathologic anatomists, who have never seen an unquestioned instance of primary genital tuberculosis in an adult female.

There can be no doubt that the peritoneum

may become infected from the fallopian tubes. Vierodt has reported a case where in a child of six and a half years tuberculosis peritonitis followed long continued vaginal discharge in which tubercle bacilli were found. Howard Kelly has shown that women in the puerperal state are peculiarly susceptible to tuberculous infection of the peritoneum and adnexa. Amann has commented on the same observation. The frequency of infection in women as compared with men has been widely noted in peritoneal tuberculosis. This fact has led to the belief that the appendages may in a large per cent of cases be first involved. Even though the evidence of tuberculous deposits may not be apparent macroscopically along the tubes in the fimbria, there is reason to believe that in many cases the endometrium and tubal mucosa may have been the avenue through which bacilli were conveyed to the peritoneum. The early experiences at Johns Hopkins as cited by Williams, illustrate how easily tuberculosis of the adnexa in the incipient stage may escape observation until a systematic and critical microscopic study is instituted. Nothnagel found 90 per cent of cases of peritoneal tuberculosis to be in women. Out of 131 cases tabulated by König (5) only eleven were men. Osler's reports show a disparity almost equally striking. Notwithstanding this difference, tabulated autopsy reports show a greater mortality among men than women. Halstead explains this by the fact that women are more frequently operated on for abdominal diseases than men and as a result of laparotomy are restored to health.

The pathology of tuberculous involvement of the peritoneum and adnexa is essentially similar. In each three characteristic types are to be observed, namely: (a) the miliary or disseminated serous exudative; (b) the ulcerative or caseous

*Read at the Thirty-third Annual meeting of the State Society, Santa Barbara, April 21-23, 1903.

suppurative; (c) the adhesive or chronic fibroid. Some variation is found in children where, as Holt has noted, the mesenteric glands are more extensively involved, secondary doubtless to infection of the bronchial and retroperitoneal glands.

In miliary involvement there is a general disseminated tuberculosis, represented by small grayish nodules studding the tubes and fimbria. Each small nodule is surrounded by a narrow injected zone of hyperemia. In the ulcerative and caseous form, commonly seen in the tubes and in the peritoneal spaces between the intestines, there may be a marked distension of the tube from a collection of pus and caseous matter if the ostium abdominale be closed. In the peritoneum the exudate may be non-purulent and take the form of a serous or sero-fibrinous effusion, either free in the cavity or sacculated.

Cirrhosis of the liver is a somewhat frequent, though not adequately explained, concomitant of this form, and in alcoholics the exudate may be stained with blood. In the adhesive or chronic fibroid variety we find the adnexa bound to the uterus and to the floor and walls of the pelvis in a more or less dense mass. Recently, with a colleague, I saw a case in which every landmark of the pelvic organs was obliterated in a mass the size of an infant's head. It was possible after prolonged dissection to isolate the left tube and ovary and excise the major portion of the right tube; but the right ovary blended with the broad ligament in a fibrous mass which, owing to its intimate relation with the right ureter was left undisturbed. The left tube was filled with caseous material and the right nodular, from tuberculous deposits. The patient made a good recovery.

Where the peritoneum is extensively involved both the intestines and omentum may be agglutinated in a dense mass. Very frequently the omentum is rolled up in a scroll under the umbilicus, and again it is often found in a nodular enlargement not unlike the nodules of a rapidly developing malignant tumor. Between the coils of intestine a fixed tissue proliferate seals the structures into a thickened mat, often enclosing within the coils a cyst-like collection of fluid.

An increasing number of cases are being reported of tuberculous infection of the vermiform appendix complicating tubal tuberculosis. Kraus (6) has recently reported a case in which in a woman of thirty there was a history of appendicitis ten years previously. A tumor was found in Douglas' cul-de-sac which was composed of a tuberculous tube and appendix and enlarged ovary. The ovary contained pus, but no tubercle bacilli. On examination it was found that tubercles were confined to the distal end of the tube and tip of the appendix. The inference was that infection was by extension from the appen-

dix to the tube along the appendiculo-ovarian ligament of Clado. I have seen this complication in but three cases. In two instances infection was clearly from the tube to the appendix, which was bound to the brim of the pelvis and had drawn the fimbria down in an adherent mass about it. The peritoneum was involved in two cases, the omentum being gathered in clumps under the umbilicus. The effusion was not large in amount and remained free in the peritoneal cavity.

The symptoms of tuberculosis of the adnexa are neither definite, constant nor clear. They are somewhat more characteristic in the uncomplicated involvement of the peritoneum. But in many instances definite differential features are wanting. Usually in the miliary variety the constitutional quite overshadow the local symptoms. Occasionally the onset is so severely acute as to simulate intestinal obstruction or gangrenous appendicitis. Again, there may be scarcely a symptom beyond malaise, a subnormal temperature and gradually increasing ascites. Diarrhea is present if infection arises from ulceration in the intestinal mucosa.

The evidences of tubal or ovarian involvement may vary from a mild salpingitis to that of pelvic abscess. Menstruation may be undisturbed or there may be irregularity with actual amenorrhea or menorrhagia as was first shown by Daurios. In subjects suffering from pulmonary tuberculosis or tuberculous peritonitis, the symptoms in the pelvis indicating disease of the tubes, ovaries or endometrium may safely lead to the right conclusion. Kelly regards pain in the back and hypogastrium the most constant and valuable symptom in tuberculous peritonitis. In many cases it is absent. There is some tenderness and persistent tympany in all forms, and in the dry, certain more or less constant friction sounds.

In the exudative form the ascites will need to be diagnosed from cirrhosis of the liver and from carcinoma, wherein the portal circulation is seriously interfered with. But it is always well to remember that cirrhosis of the liver is often a concomitant of tuberculous peritonitis. The temperature is never characteristic. In acute peritoneal invasion it may simulate and the disease be mistaken for typhoid. But in the chronic adhesive variety the temperature may be subnormal throughout.

The diagnosis of tuberculous lesions within the pelvis will be greatly aided by carefully considering the history of the patient, together with the fact that tuberculous invasion may at the same time exist in the lungs, pleura, glands, joints or bones. But unless the bacillus is actually found in the discharge or from curetted material from the uterus, the character of the inflammatory change in the pelvic organs can only be surmised. It is well to remember, also, that no de-

pendence can be placed in the showing from the blood count.

The differential diagnosis between tumor masses within the abdomen may prove easy or difficult according to the collateral evidences which may be brought to bear. I have seen plaque-like adhesions in both cancer and adhesive tuberculous peritonitis. Again, one finds nodular tumors in both these infections. An agglutinated mass of omentum, gall bladder, colon and pylorus may very closely resemble either of the conditions named.

Still again, cystic occlusions between the lower coils of the ileum have frequently been mistaken for ovarian and fibro-cystic tumors in the cul-de-sac by the cleverest of men. Nevertheless, if the history of the patient, the progress of the disease, the character and location of pain and tenderness, the temperature, pulse, condition of bowels and state of nutrition are carefully considered tuberculous peritonitis in any of its forms should be properly diagnosed.

The question of prognosis is still a matter of varying opinion. In 1884 König, whose masterly contributions to the surgery of tuberculosis mark a period of classicism, inaugurated a revival in the study of peritoneal tuberculosis by reporting 70 per cent of recoveries after treatment by laparotomy. Later he was forced to the melancholy conclusion that more time should have been allowed and instead of 70 per cent he could point to but 25 per cent who had survived. Cellier reported 71 per cent of recoveries out of 287 patients operated upon. But after two years he, too, could find but 25 per cent living. Frank reports 41 patients from Czerny's clinic of whom 26.8 per cent were well after three years. Herzfeld made a report from Körte's clinic of similar character.

Fenger, (7) in an exhaustive review, in which the ablest pathologists and operators are liberally quoted, leans strongly to the conservative views of Borchgrevink, "who does not hesitate to state that 'even the serous tuberculous peritonitis is a territory which surgery must hand back to the internal medicine clinic with thanks for the splendid opportunity which a misunderstanding gave to the profession, by means of laparotomy, to study tuberculosis in one of the large cavities of the body.'"

Happily so gloomy a view has not met with general acceptance and Fenger himself admitted that in its favorable form tuberculous peritonitis would yield 50 per cent of cures by operation. It is clear that many surgeons have been unfortunate in the selection of cases which may be properly considered operable and in the brief time allowed to elapse before reporting their patients cured. Five years would seem to be a fair limit of time before claiming a cure.

It is accepted by all that the ulcerative caseous variety is not favorable, and as a rule should be let alone. Perhaps the same may be said of the extreme types of chronic adhesive, where the peritoneal cavity has been totally obliterated.

The treatment of tuberculosis of the appendages is somewhat dependent upon the extent of area involved. If the affected part be a slight ulceration of the cervix or vagina, an extremely rare condition, the application of iodine, formalin or lactic acid following curettage of the ulcer, will usually prove effectual. Should it not, then excision and suture rarely fails to cure.

Where the endometrium is known to be involved, very commonly the tubes are also affected. But as a rule the case comes to laparotomy before this is determined and it becomes a question of curettage and ablation of the appendages or a pan-hysterectomy. In most instances of tubal involvement the latter will prove the necessary measure, anything less radical being inadequate. Generally the surgical results in tuberculosis of the appendages are decidedly favorable unless there exists extensive tuberculous involvement outside the abdominal cavity.

Ahlefelder (8) reports 13 cases, 9 of which were in married women. Only 4 were diagnosed before operation. The fallopian tubes were affected in every case save one and all the subjects were sterile. Of those operated upon 5 recovered perfect health, 5 were greatly benefited and 3 died—2 from general progressive tuberculosis, and 1 from tuberculous meningitis. These cases complicated with chronic tuberculous peritonitis showed marked improvement after laparotomy.

Sellheim (9) reports 65 cases observed at the Freiburg clinic within the past eight years. Twenty-eight of these were treated in a palliative way with much benefit. In 37 patients laparotomy was performed with the best results. Sellheim advocates the complete removal of the uterus and adnexa. In the few patients coming under the observation of and operated on by the writer, the detailed report of which would add little to the value of this review, the type of involvement was caseous suppurative in the tubes and miliary and chronic adhesive in the peritoneum. Two cases were complicated with appendicitis. In each case there had been previous to the peritoneal infection, tuberculous invasion of the lungs. All recovered from the operation, but two died of progressive tuberculosis, one six and the other 14 months after section. Surgical interference seemed of positive benefit to the others except one, in which pulmonary complications have proved a serious embarrassment.

Veit (10) believes with Borchgrevink that peritoneal tuberculosis may become cured spontaneously, but does not admit that as many will recover without operation as with it. He considers

laparotomy in all but the ulcerative caseous variety, almost invariably rewarded by cure or substantial benefit, the few failures being due to an advanced and general infection of other organs. In cases of recent development the patient should be operated upon promptly; chronic subjects should be closely observed and operated upon if spontaneous subsidence seems improbable. Veit favors simple section in the linea alba, mopping out the effused fluid and closure of the wound. Where the adnexa are involved they should be removed. Cure, he believes to be due to the antitoxic action of the serum from the wound. Statistics show 50 per cent cured and 25 per cent greatly benefited after the lapse of 4 to 5 years from the date of laparotomy. Tuberculous lesions in localities outside the abdomen are not materially benefited. Veit's conclusions may be accepted as representing the sanest view of this subject thus far presented.

DISCUSSION.

Dr. L. Brunn, San Francisco—We have only had two cases of tuberculous peritonitis. In the eastern clinics we had very frequent cases running. I have asked Dr. Sherman about his children in the hospital wards and I find that he has had no cases of tubercular peritonitis among them.

Dr. C. D. Lockwood, Los Angeles—I have one case to report. About five years ago I operated on a patient with tuberculous peritonitis, who subsequently died. A very careful autopsy was held, and we decided that the cause of death was a general tubercular infection. I also operated on a patient three years ago; there was undoubtedly tubercular infection of the tube. The right tube was tuberculous and I removed it and the ovary on that side.

Dr. J. Rosenstirn, San Francisco—The writer said that only the acute cases and cases where the peritoneal cavity was not obliterated, were favorable for operation. To that point I would say that Dr. Perry referred a male child to me who had been suffering for about six or eight months from tumorous growth in his abdomen. He had had severe pains off and on. Leukocytosis had been present, I do not exactly know how much. Hemoglobin showed marked decrease, something like 30 or 40 per cent. Sarcoma of the peritoneum was suspected on account of the hard nodules which could be felt in the abdomen, and as a last resort, laparotomy was proposed. I saw the patient and from the observation and examination I concurred in the diagnosis of sarcoma, still thinking of the possibility of its being tuberculosis. The abdomen was opened and there was a total obliteration of the peritoneal cavity, parietal and visceral layers were everywhere grown together, so that I had the greatest trouble from extensive adhesions to get to one tumor and excise a piece for microscopical examination. The abdomen was again closed and, strange to say, the boy got well. Everything disappeared in three or four months (the operation was two and one-half years ago). Microscopical examination showed tuberculosis—giant cells and everything. I only mention this that in children, at least, obliteration of the peritoneal cavity and tumorous growths could not be thought a contra-indication for attempt at operation.

Dr. Lobingier—The impression which I meant to convey was not the total obliteration of the abdominal cavity in which, when you open the abdominal

wall, you find the entire contents of the cavity matted down into a smooth, dense fibrous surface. In many cases we find no nodular development at all. You may pass the hand from the symphysis to the liver and not find anything. I had not taken up the subject from the standpoint of children, but you will find in the *Journal A. M. A.* a discussion by Roach of Boston, in which he discusses the same question for children, and I infer that it is not much different in that case. The point I wish to make is this: Where you have the intestines matted down and all the viscera in such a dense mat without disturbing the relations, then violent measures for breaking up these adhesions are likely to result in disaster. It seems to me when you disturb these relations you have to consider the amount of tissue you deal with and there is very little gained by disturbing the adhesions. Also where there is no great amount of pus as indicated by the temperature, it seems to me the operation is not indicated, as shown by the large percentage of recoveries. I am aware of the point that Dr. Brunn made of the comparative rarity here of this disease. I think, however, that close observation in climates in which tuberculous patients abound will show a larger percentage of tubercular peritonitis than have hitherto been reported. As years go by, more cases of tubercular peritonitis are likely to be reported in this country.

REFERENCES.

1. J. Veit. *Monatschrift für Geb. und Gyn.*, Berlin, XVI.
2. A. Martin. *Ibid.*
3. O. Borschke. Quoted by C. Fenger. *Annals of Surg.*, Dec., 1901.
4. J. A. Amann, Jr. *Monatschrift für Geb. und Gyn.*, Berlin, XVI.
5. F. König. *Centralblatt für Chirurgie*, No. 35, 1890.
6. Kraus. *Centralblatt für Gynäkologie*, No. 25, 1902.
7. C. Fenger. *Loc. cit.*
8. Ahlefeldt. *Monatschrift für Geb. und Gyn.* *Loc. cit.*
9. Sellheim. *Centralblatt für Gynäkologie*, No. 45, 1902.
10. J. Veit. *Loc. cit.*

THE CORRECTION OF REFRACTIVE ERRORS.*

By W. S. FOWLER, M. D., Bakersfield.

BEFORE errors of refraction can be corrected it is necessary to determine their character and degree, and in this essay we are assuming that these factors in each case have been worked out, leaving us in correcting these deformities a problem in applied mechanics more delicate and complicated than is ever met with outside the surgical department of medicine, and the profession has cause for congratulation that these problems are so successfully handled in the majority of cases.

When the eyes and their appendages are abused by excessive work to which they are daily subjected, the slightest organic or physiologic fault in a physical system below par may become manifest in the symptoms classed under the general name asthenopia, and directly connected even by laymen with the eyes, or in those more complex symptoms called nervous reflex irritations, possibly affecting organs far distant and without apparent connection with the organs of vision; and the general proposition may be laid down: "That a definite correlation between the combined sensory and motor acts must be properly estab-

*Read at the State Society meeting, San Francisco, 1902.

lished before harmonious action can be expected and comfortable vision free from local disturbances and general discomfort attained."

The optical portion of the visual apparatus must be in as perfect a condition as possible for the work it is called upon to perform, and its adjusting parts must be evenly balanced and work smoothly before unconscious action can be maintained.

The factors in these problems, with which the oculist is daily brought in contact, are refraction, accommodation and convergence or correlation of the extra ocular muscles, and, although often each separate factor is apparently of little consequence in itself, each one must frequently be accurately corrected in order to relieve our patients of symptoms which have defied medication alone, and the problems are made more complex by the consideration of the general health, kind of occupation, hours of use, and favorable or unfavorable conditions surrounding the use of the eyes.

As there neither is, nor can be, a fixed standard for the muscular power of the ocular system, any more than for other combinations of muscles in the body, it will be seen that defects are relative only, not absolute, and that muscular tone, as well as muscular strength, has a direct and positive bearing on the character and degree of these errors.

While the ideal correction of refractive errors is a complete correction (the use of those lenses which correct the whole error), there will always be as many variations from this as there are individual opinions, and these varieties of opinion seem to be supported by the successful results obtained by their individual supporters.

Cases may be worked out on the line of general principles, or by a few broad formulae, but no number of specific rules, be they one hundred or one thousand, will cover the details, and each case must be studied by itself, and when subjective methods are used, even the grade of intelligence possessed by the patient, as disclosed by his answers to questions, must be given due consideration.

The expert workman, who requires the best vision at the short range demanded by his employment, would not be comfortable with the correction given the bookkeeper or clerk, whose work necessitates a material increase of range, nor will the diminutive, short-armed seamstress do well with the correction best for a clergyman, who reads his sermon from a desk, thirty or more inches from his eyes. When the error is alike, then these differences in occupation must be given due weight in writing our prescription.

In the oculist's prescription, for local treatment of refractive conditions, lenses are what drugs are in the domain of internal medication,

and as a drug is changed when the condition for which it was prescribed has changed, so in asthenopia, a change in condition of eyes or appendages may, and frequently does, require a change in lenses. The lenses are not curative any more than drugs are curative, but when properly applied, allay harmful symptoms and indirectly remove factors in the progress of the pathological conditions. Lens prescribing thus legitimately given to the medical man, becomes one of the most important therapeutic agents within the scope of professional use.

Just as a drug affords rest and resolution, just as a splint immobilizes the broken parts and permits restitution, just as a brace removes inequalities and gives opportunity for performance of correct physiological acts, so lens therapy serves its part; and exercise, orthoptic training, hygiene, modifications of lens power, attention to the general health, and lastly, radical interference with the lengths and position of attachments of the extra ocular muscles in order to attain better balanced muscular equilibrium, complete the list of our remedial measures.

Severe eye strain, although not marked in itself, may be an agent in the production of apparently unrelated and seemingly grave symptoms to such a degree as to mislead ignorant and careless observers into the belief in more deeply-seated and dangerous conditions. It is just this type of cases—those of the minor varieties of asymmetrical astigmatism and low degrees of unequal hyperopia, with normal visual acuteness—that sudden relief and the most remarkable recoveries from distressing symptoms in distant organs are obtained.

The exercise of good judgment, and the utmost skill are necessary in the prescribing of lenses for any pair of eyes; so much is to be taken into consideration, and such slight modifications are productive of harmful results, that a medical education and a thorough training in this special form of work is obligatory; and it is to the educated physician, who, understanding the significance of eye strain, its bearing on the general health, and its proper medical treatment, that these patients should be sent. Not to the optician, who, though graduated by some ophthalmic college after a few weeks, or perhaps a few letters of instruction in a mail course, is but little better prepared for properly correcting refractive errors than the patient himself.

No layman, having education and a proper respect for his physical well being, would believe himself competent to prescribe for his eyes, should he find an impairment of his visual functions. He would realize that his defective sight was but a symptom of a physical change that must be medically understood and determined before being

properly corrected; the imperfect sight or uncomfortable vision, which composed the principal symptoms for which he consults his physician, may be the early indications of a general disease, and the treatment required represent the best efforts in preventive medicine and the conservation of physical health, as well as mechanical optical assistance.

But our patients are not all educated, nor are they concerned sufficiently in their physical condition to consult an eye specialist for these eye symptoms; perhaps they purchase glasses from a jeweler, druggist, or even a department store, and later, if the use of the eyes is still accompanied with pain or discomfort, consult their family physician, and it is to the diagnostic skill and professional integrity of the general practitioner that he is sent to the oculist for proper treatment, the majority of physicians now recognizing many of the various aches and pains which are aggravated by eye strain.

The fact that glasses have been adjusted with intent to relieve some uncomfortable symptoms is not *prima facie* evidence that the glasses are correct, and if not prescribed by a competent physician it would be probable that they were not properly prescribed. If questioning elicited the information that because the patient could not spare the time, or some other equally good reason, a cycloplegic had not been used, it would be proper and right, in child or adult under fifty, to assume an incorrect prescription.

Time is to be taken into account, and the change of glasses, as a change of medicines, is necessary to meet changes in condition of the organs involved, even if the time elapsed since the last ones were given is short, for the laity have believed, and still think, that any glasses should last for years.

Even though the glasses be correct as to power and character, the position may be faulty, either through wear or accident, and the patient may volunteer the information "that at first the glasses were very satisfactory, but after a short time they began to trouble, and were doing no good now, perhaps they are crooked."

One more item is frequently brought to the notice of the family physician, when the glasses prescribed for constant use are not worn as directed, but rest a large part of the time in a pocket.

This constant wearing of glasses is frequently objected to by presbyopes, necessitating, as it does, a change from distant to reading glasses many times a day, but the use of the bi-focal lenses, which are now very perfectly made, will obviate objections of this nature.

Proper correcting lenses, placed in substantially made and adequately fitting frames, that are periodically readjusted, do much to retain, without

increase, the primary condition of refraction for which the glasses were obtained, and prevent latter part is of as great importance as correct ual disease in imperfect or abused eyes.

There are cases that, not having at first the apparently beneficial effect of increased vision given to them, too readily learn to neglect or throw aside valuable aid, that to them does not seemingly give what is so popularly and unfortunately expected—mere betterment of sight—these are the cases in which such false judgment and bad decision could have been avoided had the patients been taught that there is a strict orthopedic value attached to every properly selected lens, both in its giving ease of function and insuring safety and comfort to an imperfect organ.

While it is unnecessary to relax the care and attention in selecting proper glasses, even to the delicate discrimination which must be necessary to determine the exact location of the axis of a cylinder to within less than 5°, or the power of a lens to an eighth of a diopter, it should not be forgotten that no mouth breather can be made well, nor can a dyspeptic be given normal digestion by the correction of an error of refraction, no matter how well and accurately the glasses be selected, and I present the necessity not of overlooking this correction, but in connection with the family physician to consider the other therapeutic indications.

The correction of errors of refraction then, consists of such measures as best establish equilibrium of the ocular organs and adapt them for the use to which they will be put, and these means consist of glasses properly prescribed, properly made and properly worn, as well as properly changed when changed conditions require a change in prescription, combined with such other therapeutic measures as are indicated, and this detail in optical work.

NATURE AND TREATMENT OF OBESITY, OR CORPULENCE OF THE MIDDLE-AGED.

By A. W. PERRY, M. D., San Francisco.

OBESITY is 20 per cent to 40 per cent excess of weight over the normal of 2.05 pounds per inch of height, or 300 grammes per centimeter.

Corpulence must be due either to; first, excessive muscular development; second, excessive fatty tissue; third, excessive water (serum) in the tissues; fourth, myxedema; fifth, pseudo-muscular hypertrophy.

The first cause is met with only in very laborious occupations and does not cause complaint; as soon as the hard work is stopped the excessive growth of muscular tissue undergoes fatty degeneration and is absorbed. The fourth and fifth causes are so rare that they only need

mention. The causes are then narrowed down to the second and third, or mixed types of these.

In my opinion, in middle-aged persons, the chief part of the excessive weight is due not to a deposit of fat, but to an infiltration of the tissues with water (blood serum). The exceptions are those persons with protuberant bellies and thin limbs. It is a latent dropsy in reality, needing only the sign of pitting on pressure to be apparent. This will be proven by argument, clinical and physical evidence.

To keep up animal heat and preserve the equilibrium of the tissues, a man of average weight, 143 pounds (65 kilos), must consume an amount of food which will produce 2300 kilo-calories under moderate exertion. The maintenance of the body weight and strength requires a minimum production of 2300 calories, which was found by Ranke (1) to be produced by the consumption of the following diet daily: Dry proteid matter, 100 grammes; fat 100 grammes; starch, 240 grammes.

This is much less than the figures of Veit (2) and a little more than those of Playfair (3); the latter found a seamstress living on proteid, 54 grammes; fats, 29 grammes; carbohydrates, 290 grammes, giving about 1660 calories per diem, and this must be assimilated and oxydized in the body. If this amount of food is not assimilated and oxydized the deficit is made up from the body tissues until the weight of the tissues has become reduced 40 per cent to 50 per cent, then the temperature becomes subnormal and death ensues.

The foregoing estimates of food values may be translated for practical purposes as follows: 240 grammes carbohydrates=400 grammes bread.

24 grammes proteids is contained in 400 grammes bread.

76 grammes proteids=280 grammes roast beef.

65 grammes fat in any form.

These statements are found in all the late works on physiology.

Playfair's minimum is the least ever found under exact studies and will be taken probably by any objector to Ranke's (min.) as a true lowest diet for any one of the same or greater weight under very moderate exertion. It is 25 per cent under the normal diet of Ranke. It was lived on by a London seamstress who earned 95 cents weekly. There is no better established fact in physiology than a minimum diet for maintenance of weight and strength.

These premises being admitted, it follows that a prolonged deficit of 20 to 25 per cent in diet from the above mentioned Ranke's normal diet must be followed by a loss of weight of the muscular, fatty, connective tissue and glandular tissue, each one losing in proportion to its being of vital necessity. Loss of weight in animals and persons dead of starvation: Heart, 3 per cent; brain, 3 per cent; blood, 27 per cent; liver, 54

per cent; spleen, 67 per cent; muscles, 31 per cent; fatty tissue, 97 per cent.

If the water excreting mechanism (the kidneys, capillaries of sweat glands, and lungs, and the vasomotor nerves controlling them) is in perfect working order, the whole body loses weight; if the water excreting mechanism is not in good order the weight of the tissues lost is replaced by water and the whole body loses slightly or not at all in weight.

We frequently meet patients who apply for reduction of weight, an examination of whose diet shows that it is much less than the above, and yet they preserve an excessive body weight. Under a diet of 20 or 25 per cent less than the above they are mathematically certain to lose fat, circulating albumen, and muscle and organ albumen. If they do not lose weight it is certain that the lost tissues are replaced by water. The often observed increase of weight after excessive use of liquids, and the corresponding loss of weight after limitation of fluids is explained (in order to hang on to the common theory that obesity or corpulence is always excessive fat) as follows: Water drinking increases the constructive metabolism, so that more fat is made and deposited from a given amount of food, and conversely destruction of fat occurs with a reduction of fluid taken.

It is a good rule, unless we have positive evidence to the contrary, to take the simplest explanation of any phenomenon. In this case the simplest explanation is that corpulency with excessive water drinking is due to the retention of water, and that loss of weight with decreased fluids depends on loss of water to the body. It is of extreme importance to know if the corpulency is fat or serous plethora or a true plethora with excess of quantity and richness of blood. It might be urged that an equilibrium of the tissue weight could exist on a deficient diet, from deficient oxydation, but there can be no such thing as a prolonged deficient oxydation with a normal or less than normal diet: this would cause lowering of the body temperature and death from the cooling of the body. There may be, however, deficient oxydation of the excess above a normal diet leading to many diathetic diseases.

Moleschott (4) found in the body of a healthy man of 60 kilos weight:

Water 67.6%	Specific gravity 1.000
Fat 2.5%	" .930
Albuminous substances 15.2%	" 1.060
Derivatives of " 4.9%	" 1.058
Salts and bone " 9.2%	" 1.900

These give an average body specific gravity during life of 1.012 to 1.040.—(Meeh.)

Fat has a specific gravity of .930 and water or blood serum 1.029—when the fat exceeds a normal proportion it should reduce the body specific gravity towards .930, and if the serum is in excess and replacing the fat the specific gravity

of the body should be 1.030 and higher. This is just what is found in children from 7 to 13 years of age, who certainly have an excess of fat. The specific gravity was found by Meeh (5) (average of four children) 1.012. I found a fat boy of 12 years, weight 45 kilos, having a specific gravity of .980. Two very thin young men had specific gravity of 1.039 and 1.047; three plump females of 20 years had specific gravity 1.021, 1.025, 1.027. With stout middle aged persons the specific gravity is found to be high—1.030 to 1.040.

Clinical Evidence—Middle aged corpulent persons drink a great deal. In steam baths they often lose 900 to 1500 grammes weight. The difference between the night and morning measure of the leg is one inch or more. In young adults the difference is one-fourth inch. In middle age the average is one-half inch. This is due to a shifting of the serum in the lymph spaces. They lose weight on a restriction of liquids with a normal diet of bread, meat and fat, and increase in strength. By the proportion between the water taken (or watery liquids) as drink and the urine excretion, the urine should equal 68 to 80 per cent of drink in temperate climates and with moderate exertion; if it is much less than this water is accumulating in the tissues.

Serous plethora is caused by a want of balance between the ingestion and excretion of water and indicates a disorder (not necessarily a disease) of the water excreting apparatus. The capacity of the kidney to excrete water is ten times greater than the usual amount of 1200 to 1600 cubic centimeters of urine per diem. When large amounts, 2000 to 3000 c. of beer are drunk in 2 or 3 hours, Maxim and Rieder (7) found an immediate rise in blood pressure of 40 mm. of Hg in 40 minutes, which fell back to normal in two and a half hours, when most of it had been excreted with the urine or had passed out into the lymph spaces to be excreted more slowly. When this accumulation of liquid remains in the tissues we must assume some disorder of the water excreting mechanism. When 1200 cc. of liquid is taken as drink per diem with a Ranke's diet as above, 1777 cc. of water is to be excreted to maintain an equilibrium. This is made up as follows:

180.	cc. from oxydation of hydrogen of bread
55.5	" " " " " " fat
49.	" " " " " " meat
292.	" " moisture in bread and in meat
1200.	" taken as drink.

1777.5 " total water

Of the 1777 cc. of water 60 cc. is excreted in the feces, at least 800 cc. from the lungs and skin, leaving about 917 cc. to be excreted in the urine. The minimum of 800 cc. estimated to be given off by the lungs and skin was found by Pettenkoffer (8) and Veit in their respiration

chamber experiments on a person at rest. This is enormously increased by exercise. The loss of water excreted with the urine should be 52 to 68 per cent of the total water ingested as drink, formed from the food and contained in the food.

Diagnosis of corpulency due to serous infiltration as against true fatty infiltration: First, the specific gravity of the body is 1.030 to 1.040; second, the daily amount of urine is less than 60 per cent of the liquids taken as drink; third, they preserve an excessive body weight on 10 per cent less than a Ranke normal diet. The third method is the most reliable, but it involves weighing and measuring all food and drink except water and calculating, from the table given, the contents of each in carbohydrates, fat and proteins.

The treatment may be medical or dietetic, which last is the dry treatment used by Prof. M. J. Oertel for heart disease. The use of the thyroid extract has certainly often good results, but is often attended with disturbance and weakening of the heart action so that its use must be suspended. The use of saline purgation will reduce weight and at the same time reduce the richness of the blood in albumen, with increase of salts, both conditions to be avoided. Heinrich Stern (6) has pointed out that a free use of thyroid extract has produced diabetes. To reduce weight in serous plethora or in actually developed dropsies not dependent on primary parenchymatous kidney disease, we should allow only 300 or 400 cubic cc. more of water to be taken daily in drink and food than the daily amount of urine secreted. A minimum of 800 cc. of water will be lost by the lungs and skin, and so a net loss of 400 to 500 cc. or grammes of weight will result. The following taken from Oertel's *Kreislaufstorungen* gives the percentage of water in food prepared ready to be eaten:

Numbers indicate percentage of water: Soup, 91.6; boiled meat, 70; roast mutton, 74; roast beef, 59; roast veal, 78; dried meat, 40; fish white, 74; pudding, 48; mushes, 80; bread, hard, 30; bread, soft, 40; carrots, boiled, 82; spinach, 83; peas, 69.5; lettuce, 97; fresh fruit, 85; string beans, 88; celery, 84; asparagus, 94; milk, 87; cream, 65; cheese, 35; bakers' toast, 1.18; crackers, 7.50; potatoes, boiled, 70; turnips, boiled, 82.5; cabbage, 85.

To attempt to reduce the weight of a person with serous plethora by cutting down to less than Ranke's normal diet, namely: Meat, 280 grammes; fat 100, bread 400, is to make a serious mistake. Unless the above amount or a physiological equivalent is taken, the body will still consume that much to maintain animal heat, taking the deficit in food from its own tissue; the fats will disappear, then the muscular tissue, and a condition of debility ensues which will favor in-

crease of serous plethora and of body weight. To diminish the bread and meat of a person with serous plethora will make his blood poorer in albumen and in corpuscles and richer in water, and will still further increase the transudation into the lymph spaces and also his weight. The conditions for which reduction of weight is indicated are angina pectoris, any form of heart disease with decompensation, as shown by short breath, palpitation, edema of the feet, chronic bronchitis, with dyspnea and debility in plump middle aged persons without any obvious cause. Von Noorden says that reduction cures are indicated where chronic interstitial nephritis, rheumatism, gout, diabetes and tuberculosis are associated with obesity.

REFERENCES:

1. *Ernahrung des Menschen*, Munchen.
2. Veit, *Zeitschrift fur Biologie*.
3. Vayfair, *Medical Times and Gazette*, 1865, page 460.
4. Moleschott *Physiol der Nahrung*, Mittel, 1859.
5. Meeh, *Zeitschrift fur Biologie*, 1875, page 448, Bd xv.
6. Heinrich Stern, *Medical Record*, Vol. 59, page 201.
7. Maxim and Rieder, *Oertel Kreislaufstorungen*, page 460.
8. Pettenkoffer and Veit, *Zeitschrift fur Biologie*, Bd II, page 450.

THE COMMON RAT.*

WITH SOME SUGGESTIONS AS TO THE BEST METHODS FOR ITS DESTRUCTION.

By DONALD H. CURRIE, M. D.

Assistant Surgeon Public Health and Marine Hospital Service; Bacteriologist M. H. S. Laboratory, San Francisco.

THE rat is classified by zoologists as follows: Class, mammalia; order, rodentia; family, Muridae; sub-family, Murinae, which contains over 15 genera. Of these we have to deal with only one genus, namely, *Mus*. This genus alone, however, contains over one hundred species, but fortunately only three have any interest to the medical or general public. They are in order of their importance: *Mus Decumanus*, *Mus Musculus* and *Mus Rattus*.

The *Mus Rattus*, or black rat, was originally a native of India and from there, by means of commerce, it has spread over the greater portion of the globe, destroying the original house-haunting species wherever they gained a foothold. They thus invaded the continent of Europe, England and America and were known as the "black rat," or "common rat" for nearly two centuries; when, owing to the invasion of their destroyer, the Norway rat, they have become almost extinct in the above-mentioned countries except parts of South America, where the lower type of development of the original species of rodents on the one hand, and the slower invasion of the Norway rat on the other, still enable it to exist to a certain extent. The body of the black rat seldom exceeds seven inches in length, while its tail is from eight to nine inches long. The color is usually bluish black, although an exception to this is met with in tropical countries where it assumes a reddish tint (the type known as *Mus Alexandrus*). The abdomen is somewhat lighter in color than other

parts of the body. Compared with the Norway rat it is mild and tamable in disposition, and is the ancestor of our white rats.

Mus Decumanus—By far the most important, if not the only species we, as sanitarians have to deal with, is *Mus Decumanus*, or the Norway rat. This term is a misnomer, as not only is this species a native of Western China where it is still found in a wild state, but Norway and northern Europe generally were invaded at a later period than was southern Europe and England. Their almost world-wide invasion, when once begun, was rapid and unobstructed. They entered Europe by way of Asia Minor and the Mediterranean ports; were carried from Gibraltar to Western Island and from thence to England. At a still later date they were imported to America. Wherever they landed they accommodated themselves to the conditions met with, and with surprising rapidity destroyed not only the preceding invaders—the black rat—but all of the house-haunting species of rodentia which still remained except *Mus Musculus* (or common mouse), which was protected by the small diameter of their burrows and their cautious natures.

In reading the older authors who witnessed the invasion of the Norway rat, we are led to infer that they were at that time even more predatory and ferocious than their descendants of the present day. Thus, in sections of Western Island, where they first made their landing, they completely destroyed the frog and even depopulated shallow fish ponds. Soon after this, in hopes of destroying the natural wood rat, which was doing great damage to the cane fields of Jamaica, the inhabitants introduced the Norway rat. This experiment had the result so frequently seen when a foreign animal is introduced into a country to destroy another species—they exterminated the wood rat promptly, but became a worse pest themselves. This species is of heavier build than the preceding, from eight to nine inches long; the head is bluff and rounded; ears short and broad; tail shorter than body and head combined; color of an uniform grayish-brown above and white below; ears, feet and tail of a flesh color. The color may vary considerably from the above type, even be quite black. The female bears from 15 to 50 young per year, which in turn are able to become mothers at five or six months of age. This wonderful productiveness, combined with its habits, ferocity, strength and cunning, make it proof against extinction by any of its natural enemies; and these qualities, together with its adaptability to almost any conditions, its great powers of destruction, and the fact that it is probably the greatest factor in the spread of a disease that in one outbreak caused the death of one-third of the population of Europe, puts even man on the defensive. To counterbalance its natural safeguards, two factors

*Read before the State, County and Municipal Sanitary Conference of California, September 8, 1903.

work to keep the number of the species within reasonable bounds, namely, the ratio of births is eight males to every three females, and that, while in times of plenty the rat is more of an epicure than he is generally accredited, in times of scarcity it becomes a cannibal, the stronger males devouring not only the weaker members of their sex, but it is stated even females and their young. While omnivorous, it prefers a diet composed largely of meat, and will take great risks to procure it. While all of the same species, differences in environments have caused a considerable difference in habits and appearance, in some cases amounting almost to a variety. The most important of these subdivisions are the sewer rat and the house rat. The former lives in sewers and about the water front. They are the largest and fiercest of their species, and are said to confine themselves strictly to this habitat. The other, the house rat, lives about dwellings, barns, etc., but unlike the sewer rat, is a great traveler, making frequent migrations to distant places, sometimes in large bodies as though by a common agreement.

The only other species of much importance, from either a sanitary or economic standpoint, is *Mus Musculus*, or the common house mouse. It, also, is an Indian invader, but, as before mentioned, the small diameter of its burrows enabled it to escape the fate of the black rat. Its chief habitat is the dwelling of man, although it is found less frequently in barns and warehouses; its presence in these places in any considerable number is a good indication that there are few or no members of *M. Decumanus* present.

In view of our lack of definite knowledge as to the habits of the rat, especially as to whether it confines its search for food to a limited area, or has a wide range; whether those found in sewers remain there, as has been claimed, or make frequent excursions to houses, it is better to apply measures of destruction to all areas infested, whether houses, sewers or wharves, rather than to direct our efforts to only one class of such places—sewers for example—trusting that those living in other places will find their way to the trap or poison. Another characteristic of this animal must be borne in mind when dealing with problems of rat destruction, that is, aside from the normal periodical migrations the rat is easily frightened by an unusual mortality, whether from poison or disease, and such an occurrence among them will sometimes cause the sudden departure of large numbers. Not only is this an important fact in the spread of diseases, but it may lead to errors in estimating the number of rats that have been destroyed, and thereby cause an undue confidence in the methods employed. Such a migration gives no permanent benefits, however, for not only do the original inhabitants return after a

time, but those from outlying and over-populated districts may seize the opportunity to enter the depopulated area, attracted by the greater abundance of food and the lesser competition; at any rate, the deserted district soon becomes reinfested. This latter factor adds greatly to the difficulties in the extermination of rats in a given district, success only inviting the influx of rats from surrounding places. In this connection it might be mentioned that one of the principal means by which seaports are kept infested by these rodents are ships, especially those carrying grain; and unless precautions are taken either to prevent rats from going aboard vessels at their port of departure, or methods are employed at the port of arrival, having in view either the destruction of rats aboard the vessels or the prevention of their landing, the chance of destroying them in a city with a large shipping becomes much more difficult.

Looking over the history of this animal that has been endowed by nature with qualifications sufficient to render it capable of, in less than three centuries, spreading over the whole world and holding without difficulty every foothold that it has obtained, we cannot expect that the task of its destruction will be either an easy or a short one; nor would it be reasonable to suppose that even if its destruction was accomplished in a given locality that it would be anything like permanent, unless measures were kept up; and it may be both hoped for and expected that at no very distant date it will be as much the duty of our municipal governments to destroy the rat as it is to enforce the removal of garbage; and then it will become the duty of our quarantine officials to destroy rats aboard vessels before they are allowed to dock; both the sanitary and commercial welfare will demand it.

The more common methods employed in the destruction of rats might be classed as follows: (1) poisoning with chemical substances; (2) infecting with Danyz's virus; (3) destroying by the use of predatory animals; (4) trapping; (5) killing with poisonous gases in confined areas; (6) construction of buildings and other methods tending to make entrance difficult or impossible; (7) use of substances disagreeable to the rat, causing him to leave a given locality; (8) the offering of rewards.

Poisoning With Chemical Substances is the most common method employed for the destruction of rats on a large scale. Its advantages are that it is cheap, easily applied and effective, and is probably no more liable to cause a premature panic among them than are other methods. Its disadvantages are that it is sometimes dangerous to people and domestic animals, both from the possibility of dogs, cats and even children eating the poisoned bait, or from the poisoned rodent

vomiting and contaminating food stuffs. Its safest and chief application is its use in sewers and other places not frequented by human beings or their pets. In the employment of this method we have to choose between two classes of drugs—those killing quickly and those causing death after a considerable lapse of time. The first class has the advantage of destroying the animal within a few moments after ingestion, thus preventing it from doing damage by food contamination; and when applied on a bait which cannot be dragged about, such as lard, and given such protection as is offered by a box open at either end and of small enough diameter to prevent anything larger than the rat from entering it, it is probably the safest class of chemical poisons that can be used. Its disadvantages are that the suddenness of death is apt to frighten the rats that may witness it and cause them to become suspicious of the bait. Of the quick poisons, strychnin and potassium cyanid are probably the best. Either of these may be applied on the bait, in substance, in solution or in the form of a paste made by rubbing up the chemical with lard or some similar material. As the presence of these chemicals will be detected by taste, it is well to have it of sufficient strength to insure death from one or two mouthfuls of the bait. The quantity of the substance necessary to cause death is, in the case of strychnin or potassium cyanid, very small. In a few experiments performed in our laboratory it was found that even a small amount of potassium cyanid was almost instantly fatal; one grain of strychnin killed in three minutes; one-third of a grain required over four hours, while in an unknown, but very small amount, death took place in 12, 24 and 36 hours respectively; so a bait of sufficient strength to insure the ingestion of at least two grains is to be desired if a rapid result is to be obtained.

The slow poisons have the advantage of not frightening away or causing suspicion among the unpoisoned rats; too long a time elapsing from cause to effect for even this sage to reason it out. The animal usually suffers for some time before death when poisoned with this class of drugs and (especially if water is not convenient) in its mad search for drink it frequently leaves the locality in which it sickened. This is an advantage when employed in a dwelling, as it may save the necessity of tearing up a floor to remove the source of the odor emanating from the dead rat. The disadvantages incident to the use of these poisons in dwellings or public places are the proneness to vomiting and the excessive thirst which they cause, which, while endeavoring to quench, may cause the animal to enter rooms containing food and drink and contaminating the same. Therefore, when such poisons are employed in dwellings, care should be taken to see that all foods and fluids are protected.

Of the slow poisons, phosphorous and arsenic are probably the best; and our experience here would lead us to conclude that the former is the more certain. The several "pastes" and "rat poisons" on the market owe their efficiency chiefly, if not entirely, to a mixture of the substances, and when employed on a small scale they are the most convenient form to use; but when required in large quantities it is economy to make the mixture, and this can be done by rubbing up five or ten per cent of the phosphorus or arsenic with some oily substance, such as lard, and applying the paste on cubes of rye bread, meat or fish. These should be placed in infested localities; the bait as well as the poison should be changed from time to time in order that the rat may neither tire of it, nor become suspicious.

Infecting with Danyz's Virus.—This organism, discovered by Professor Danyz, is a bacillus of the para-colon group closely resembling and probably identical with the bacillus typhi-murium, the cause of a disease among mice (*Mus Musculus*). Danyz was able to raise the virulency of this organism to such a degree that it became as fatal to rats (*Mus Decumanus*) as the bacillus typhi-murium was to *Mus Musculus*. He further claimed that not only did it destroy rats that actually ate it, but that those, while ill, transmitted the disease to others, thus causing a progressive epizootic which would destroy rats without injuring man or other animals. The experiments of Passed Assistant Surgeon Roseneau, Director of the Public Health and Marine Hospital Laboratory in Washington, and a similar series of experiments performed in this city under the direction of Passed Assistant Surgeon Blue show that when this bacillus is fed to rats in the laboratory about from 50 to 90 per cent of the animals so treated succumb; that when healthy rats are shut up in small cages with those that have sickened, a small per cent only of the former become infected and die; and that those rats which sicken and recover are immune to subsequent infection.

To summarize and apply the knowledge obtained from these experiments: Rats which actually eat the virus die with almost the same certainty that attends ingestion of chemical poisons, but it is very doubtful that there would be any spread of the disease among rats in their natural habitats; that is to say, when not confined to close contact with the sick, and that the harmlessness of the virus to man and domestic animals makes it especially useful about dwellings and public places. It cannot be expected to destroy all the rats in such a locality, however, for the reason that a certain per cent recover and become permanently immune. Whether this immunity is transmitted to their offspring I am unable to state. Next to this immunity the greatest disadvantage is the expense incident to the use of this method, a single tube of the virus costing 70 cents,

which is only sufficient to saturate one-half a loaf of rye bread. The virus can be obtained direct from the Pasteur Institut, Paris, France, or from their American agents; the directions for the use are sent with the tube.

Destroying by the Use of Predatory Animals—The time-honored use of the domestic cat and dogs, especially the terrier breeds, is too well known to require discussion. They are useful in killing and frightening away a certain number of rats from dwellings, stores and warehouses, but do not destroy enough to make them of much importance. The mongoose has been used in some countries for these purposes, but I am informed that they have not proved to be very satisfactory. It is illegal to bring this animal into the United States, and therefore it cannot be used here. The weasel and ferret have been employed to a considerable extent by professional rat-catchers, especially in large commercial houses, and while probably effective in destroying the rats, it would be a dangerous experiment to turn such animals loose upon a community. The possibility of their having the same disease that the rats are subject to; whether their powers of destruction would not be as great as those of the rats, and whether they would confine themselves to the city or go into the neighboring rural districts, where their destructiveness is well known, are serious problems to be considered before such a step is taken.

Trapping—This method, when properly applied, is capable of producing fairly good results in a limited way; but owing to the sagacity of the animal, to be entirely successful it requires some care in the choice of trap, bait, location and attention to details. It is a better method for the individual householder than for municipal authorities, as it has been found in the latter case that the loss of traps, wages of men to care for them, and the cost of keeping a horse and vehicle to move the traps from place to place, make the cost per rat destroyed far above that of poisoning and even more expensive than the offering of rewards.

There are a great many styles of traps on the market, including both those that catch the animal alive and those that either kill outright or seize the limbs and hold until the animal is dispatched. The former class are usually constructed so as to be capable of holding a large number at one time, while most of the latter have to be reset after each rat has been caught. In choosing a trap of the first class described, one point of importance is to see that the meshes are not too large, otherwise young rats will frequently make their escape. The large per cent of young rats among those trapped would seem to indicate that those of riper years are cautious about entering such devices.

Killing With Poisonous Gases in Confined

Areas—This method, while ideal on board ship, is of little service ashore, for the reason that we have few "confined areas," the animal being able to escape by the same way it enters, either into a sewer, adjoining house, or subterranean burrow. This method has been tried in the sewers to a limited extent, but it is doubtful if it is ever attended with very good results, the spaces being too large and escape ways too numerous. If it has any effect at all it would probably be to run the rat from the sewer into the house, which is to be avoided. Sulphur dioxide or chlorin gas are about the only substances that can be employed for this purpose; formaldehyde is not poisonous enough to animal life, an adult rat standing an atmosphere containing two per cent of the gas for half an hour; hydrocyanic acid and arsenureted hydrogen are too poisonous to be handled with safety; carbon disulphid, carbon monoxid, an illuminating gas, are too combustible.

Construction of Buildings and Other Methods Tending to Make the Entrance of Rats Difficult—A well constructed building, having a cement floor in the basement, with no spaces between the outer and inner wall, and with pipes leading to sewers well trapped, is a great aid to keeping a place free from these pests; and of even greater importance in this connection is the closing of all abandoned drain pipes leading from the houses into the sewer, this being the most usual route followed in traveling to and from these places.

The importance of garbage being deposited in metallic covered receptacles might be mentioned here, for the rat's food consists chiefly of what man throws away or leaves unprotected, and it will frequent only those places where such food can be most easily obtained. While not just relative to this part of the subject, it would not be too much of a digression to call attention to the advisability of requiring all ships in port to keep rat guards on their hawsers, not, as has usually been the case, for the purpose of keeping rats from coming aboard, but to prevent the landing of unnaturalized ones. In spite of this, however, some rats will leave a ship unless it is anchored well out in the stream, and swim ashore, and some ships will be near enough to the wharf to enable the rat to jump ashore, so that the importance of a wharf so constructed and of such material as to make a landing difficult or impossible should not be lost sight of.

The Use of Substances Disagreeable to the Rat, Causing It to Leave a Given Locality—This is probably the least important and most selfish method so far mentioned, and I see no place for it in properly conducted rat eradication. The most commonly used substance of this class is the so-called "chlorid of lime" of commerce. It acts by sticking to and burning the soles of the feet, when scattered in the burrows or runways of the

animal. Of the opposite of this—substances attractive to the rat—I have no knowledge. Oil of rodim is the one for which the claim is most often made, and is used to attract the animals to poison or bait.

The Offering of Rewards—This has been employed in a number of places with some success. Just how economical it would be would of course depend upon the locality and as to how badly infested it was. The average wages of the laboring class divided by the number of rats the average individual would catch in a day if he devoted his whole time to this pursuit, would probably be a rough estimate of the amount of reward per rat necessary to be attractive if large numbers were to be destroyed, although a moderate number could probably be obtained at a lower rate if such a reward were sufficient in amount to be attractive to boys. The only objections that I have heard offered to this method are: First, that attracted by the reward, some thrifty individuals have gone into the rat raising industry; and, second, that in countries where plague prevails among the rats, the number of cases might be increased by the handling of them.

The first of these objections could be met by not offering too large a reward, and withdrawing and renewing this reward without notice and at irregular intervals. The second objection would be met, partially at any rate, by the use of tongs in the handling of the dead rodents.

We see from what has been said that the methods that may be employed for the destruction of rats are numerous, each having some advantages and some disadvantages, probably a combination of several of these methods being the best way; and while the most important are being applied by the municipal authorities, it would be of advantage to, by means of a circular published in the daily papers, call upon all householders and citizens to contribute their mite to the work by destroying those about their own premises, the circular setting forth the most practical method for this purpose.

THE PRACTICAL VALUE OF THE STATE MEDICAL LAW.*

By W. W. CROSS, M. D., Visalia.

MOST of us are familiar with the State law supposed to govern the practice of medicine in the State of California only by reading it as printed in the Register. A limited experience in watching an attempt to put the law into action against an offender soon brings one to look upon the whole matter as a very complicated affair, and to wonder if something could not be done to make the present law more efficient, or sup-

plant it by another. To make a new law would mean to learn many things after it has been enacted which have been gained by experience with the present one, and it is doubtful if a new law could possibly work any better than the present one can be made to, by some changes or by other matters on the outside being adjusted to make it operate more efficiently.

When anyone guilty of violating the present law is arrested, he at once puts up all the fight in him, and brings to bear all the influence of his friends to avoid conviction. The complaining witness in the case will, without doubt, appear in court a much worse person than the party on trial, as I have had an opportunity to observe. I can safely state that all persons who were present at one trial I have in mind felt very sorry for the complaining witness in the case. The defendant generally is a man who advertises in the daily or weekly papers, and I am sorry to say that the purchase of a little advertising space in one of the so-called moral mouthpieces of the public soon lulls it to a beautiful silence, or causes it to take up the cause of the defendant for the profit gained from the advertising. They speak not of the benefit to the public in general if the law governing the practice of medicine is enforced. They do not in any way try to shape public opinion to secure a conviction, thereby suppressing a dishonest practitioner, who, in almost every case is an ignorant one.

I quote here a contract which came to my hands from the patient who signed it:

Dr. M. E. L. Fredo,
Specialist and Sanitarium,
No. 714 S. Court St.,
Visalia, Cal., January 9th, 1903.

I Dr. M. E. Elfredo Here by agrees to dottor Mr. J. Salazar and furni She all Medicina and cash for the Som at fifty \$50.00 Dollare in monthly payemant \$10.00 dollar down and the balance teen \$10.00 Dollare thirty day after each month tal it all payde.

I Mrs. E. Romero I promer to pay Dottor M. E. El Fredo the abov contractts monthly payments taen \$10.00 Dollare I signo my name.

MRS. E. ROMERO.

and I Mr. J. Salazar Takey back Satha and I have to call another dottor that Mrs. E. Romero To pay eitre one I call for Mrs. Romero.

DR. M. EL FREDO.

With the above specimen before us we would not expect anyone to accuse us of jealousy, or of fear that our practice would be taken from us by a man who could do no better in an attempt at a little ordinary English. We certainly are not going to be benefited to any great extent if such a person is interfered with in his ravages upon a confiding public. Yet we can safely say that should any member in this room swear to a complaint against this party where he may now be at work, and he is still at large, it would be a sad day for the complaining witness, and he might in the end have to defend himself against

* Read before the San Joaquin Valley Medical Society, Sixteenth Annual Meeting, Fresno, October 13, 1903.

a damage suit, or pay some attorney a good fee to stop the proceedings.

Unfortunately for us, the fight made against such persons is for the benefit of the general public, and with them the fight must be made. A gentleman dislikes to go out of his way to mix up in a row with such men as these persons generally are, and when he does, if the general public could be made to see that the law is enforced, not from personal jealousy, through business motives or as a matter of persecution, but for their own good, then a conviction could be had. It is not possible to get a conviction in these cases unless the medical men do take an interest; because they are working in the field that will bring them in contact with violators of the law, and upon their information only can the grounds for an action be secured, and when once an action has been commenced, it should be so handled that the jury can be made to see why the action was commenced and why a conviction should be made.

To do this all complaints should be made by some one, away from the local fight, whose business it is to look up such cases and file the information against the defendant. By so conducting the suit, no local conditions can enter into the action, but a straight fight can be made to make all persons conform to the law because it is right; and besides, the public has a right to be protected. Then the fact that Dr. A, a local physician, had an encounter with the defendant, or there had been trouble in a certain drug store, all of which excited Dr. A to swear to a complaint against the defendant, the jury could not take into consideration in coming to a verdict; it should not enter into the case at all.

We have a board, or a man representing the board, who looks after such cases. He knows nobody's trouble, but is here to protect the community at large. In this way a member of the local profession will not have to quit his work and mix in a row or antagonize all the patients of the defendant. By such a system all illegal practitioners would be more readily reported by the local physician. A local medical society swearing to a complaint would be just as unsuccessful as an individual in fighting against such a defendant. If the same person conducted all such cases a record would soon be made of persons drifting from place to place practicing without a license. I would cite the federal courts in the prosecution of offenders, and the readiness with which a conviction is usually obtained, and compare them with the general criminal proceedings of any community. The national laws are enforced much more quickly and rigidly, because some one is always working for that purpose, and local affairs do not figure. The business of the complaining witness will not suffer if he swears to a complaint.

In the past year we have seen two trials in which the prosecuting attorney made a hard fight, but in both cases the local state of affairs prevented a conviction. The trials cost the friends of the defendant a thousand dollars, and the district attorney felt that his only way to win was to keep trying and make the business so unprofitable that the defendant would finally leave the country.

We have taken the pains to gather from reliable sources the work done by the State Board of Examiners, and find that they have spent money in prosecuting persons practicing in violation of the law and they have found convictions more easily made when conducted by them, than when left to the local district attorney. We think that it should be the duty of the Board of Examiners to conduct such prosecutions, and it is just as necessary that men who never have made application for a license or seen the inside of a medical school be hauled up as to require a high standard for admission to practice from those who have spent all the money they had endeavoring to acquire a medical education. Unfortunately, the board has troubles of its own, and as its supply of money is not by any means as large as the demands made upon its treasury, some help will have to be given, either by the State, from where it should come, or from the medical profession in the State.

The present method of organizing the medical profession may in the near future make it possible to get help in such matters, though it does seem unjust that the medical profession should tax itself to protect the people. The people should meet these expenses, for they reap the benefit. A patient who is informed that he has bright's disease and cannot be cured, or that he has a condition from which he can be relieved only by an operation, is in a frame of mind to accept the promise of a quack, and will readily give up money when promised a cure, or worse still, perhaps allow a malignant condition to advance past an operative stage. People who are imposed upon can only be protected by the profession showing them how and when their confidence is misplaced and stimulating them to enforce laws already enacted for their good.

There is another clause in the law whereby dishonest practitioners who have a license can have their license revoked; this also should be enforced. To this end the State Board of Examiners have also taken steps, but find themselves confronted by suits attacking the constitutionality of the act, and that feature of the fight is now pending in the courts. In all of these legal battles the business fight peculiar to any place comes at once prominently forward, and a defendant always tries to avoid conviction by pleading before the jury, persecution, business jealousy or personal grievances of the complaining wit-

ness. The complaining witness may be honest in swearing to the complaint, but generally he is incited thereto by some personal feeling; and if he has ever at any time in his life been a little off color the attorneys for the defense go back over his trail, and almost no one present will have much compassion for the complaining witness.

I hope that among you who are present, or those of you who may hereafter read this, and have influence that you can bring to bear, will do so. If a little more interest may be aroused on the subject, I will feel that the time we have consumed has not been wasted.

DISCUSSION.

Dr. A. B. Cowan said that the present was a fairly good law, gained after a hard fight. The law seems to be good and states fully what persons are to be considered as practicing medicine and what the penalties for doing so illegally are. He considered it the duty of county societies to see that suits against illegal practitioners were brought and properly fought. In his opinion the licensing of osteopaths nullified a goodly portion of the law, for they could do much harm, and it was not possible to get at them. He cited a case of strangulated hernia that fell in the way of an osteopath who counseled against operation; the patient died. District attorneys will do little or nothing; the societies should see that the work is done.

Dr. Chester A. Rowell said that he had unfortunately not been present when the paper was read. As to the law, he had but little to say. It was prepared by a committee of the State Society and fought for by them. It had been a very difficult matter to make and keep any law regulating the practice of medicine for the past 25 years; the present law was a compromise, but he thought it a good one. He opposed the compromise made in letting the osteopath bill go through in order to get the medical law, for he considered it a bad compromise. The present law he considered broad enough to cover the ground, and he had no doubt that it would be supported by the Supreme Court.

Dr. Geo. A. Hare thought the whole subject needed plenty of illumination and discussion. There had always been a fight over any medical legislation, but that this was the case was largely the fault of the profession, for it was so poorly organized. While there are many doctors, they are or have been indifferent and organization has meant nothing to them; the whole question, he thought, hinged upon the intelligent and complete organization of the medical profession. When the bill was passed, it was fought for by the State Society, but the Society then had but about 400 members; now it has 1400 members at least and is representative of the whole State, and a large percentage of the physicians in the State. Individuals, he thought, could do but little to enforce the law; an organized profession could do a great deal by awakening public sentiment. He said that in Fresno County they were fortunate; no member of their society would refuse to swear out a complaint and the newspapers would help them; one of the papers would not accept quack advertising and was a staunch friend of the medical profession. He thought the day fast coming when every reputable doctor in the State would have to be a member of his county medical society, and then the public could not turn down the medical men in a community, for they would

be organized and prepared to mold public opinion on such matters.

Dr. W. N. Sherman said that conditions in Fresno were ideal, for they had a large and harmonious county society, and could do a good deal in that way. In other places, where there were no county societies and the profession was not harmonious, little could be done.

Dr. Philip Mills Jones discussed the question of organization and its relation to this matter of properly carrying out the spirit as well as the letter of the law. The movement toward complete organization was spreading so rapidly that he thought it would not be long before all the quacks and illegal practitioners could be driven out. But county societies would have to help in the matter by looking after the physicians in their counties and reporting all illegal practitioners to the State Society office, or to the Board of Examiners. The Board should bring the suits in all cases, for it was the duty of the Board to protect the public by seeing that the law which they represent is enforced. The Board would very gladly help any community or any county society in the work, and if necessary would see that the suits were properly brought.

Dr. Cross, in closing, said that the value of organization could not be overestimated in this connection. With a harmonious organization these suits could be more easily and readily handled and convictions secured. Fresno and Tulare counties were opposites; in the latter there was no society and the profession was not at all harmonious. He thought it not right that he, as an individual, should be called upon to get into such a dirty mess as a fight against an illegal practitioner in order to protect the public, who turn around and "roast" the man who brings the suit and sympathize with the quack, whom they regard as a martyr to professional jealousy. The Board of Examiners should be kept at work on this thing, and if the State will not appropriate money for attorneys, then the societies should do so; but the work should be done and be done by the Board. If the quacks are prosecuted often enough and hard enough, they will be forced out.

NIHILISM IN THERAPEUTICS.

In an address to the Minnesota Pharmaceutical Association, under the above caption, published in *Northwestern Lancet*, October, Dr. Richard Olding Beard has some remarkably pertinent things to say; and he says them forcefully. He speaks of three factors that have lead the pharmacist from his former standing amongst the arts into the ranks of commercialism and away from friendly relations with the physician. "In the men—for you have filled the ranks of your should-be profession with imperfectly educated and poorly trained recruits." "In the matter of methods * * * you have too commonly permitted your licensees to prescribe as well as to dispense drugs. * * * You have frequently encouraged the practice of repetitiously filling prescriptions, often for miscellaneous employment, without orders from the writer." "In the matter of materials the indictment is fully as serious a one. You have not always required a sufficient guarantee of the quality of materials to the use of which your customers have committed their faith. A want of uniformity in the pharmaceutical preparations you dispense has prejudiced the possibility of a systematic study of their effects. Standardization of drugs is a very imperative need. You commonly keep upon your cabinet shelves preparations of whose composition you know little or nothing, whose virtues only

the advertisements allege, of whose adaption to the needs of patients you and they alike are ignorant."

(Possibly the organization of a Bureau of Standardization to certify to standard products, such as that proposed and being investigated by the American Medical and American Pharmaceutical Associations, would do much to remedy the evils pointed out for the Xth time, and here cited by Dr. Beard.)

COMMUNICATIONS.

Improper Advertising Methods.

To the Editor of the State Journal: Allow me to call to the attention of yourself and the readers of the JOURNAL a matter that seems to me of great importance in the preservation of the self-respect of medical men. Of late years we have been flooded with an ever increasing mass of so-called "literature" relating to patented pharmaceutical products, mostly of the coal-tar variety, reprinted from German publications. In most cases these preparations are not recognized in Germany at all; such write-ups, destined to increase the tribute from gullible foreigners, are more easily obtained in Germany from professors and their assistants than in this country, where ethics have caused certain restrictions to be placed on commercialism. This stuff goes into the waste-paper basket at once, or should do so, but it is none the less a nuisance. If we refuse to read the "literature," why should we not refuse to see the persons sent out by the manufacturers to interview doctors and mislead them into considering or using these worthless preparations? As a rule these agents are ignorant of anything save the words that are put into their mouths by their employers, and they assume a knowledge that they do not possess, often in a most aggressively impudent manner. Other preparations are advertised to the public, on billboards, fences, at the corner grocery, in the daily press, etc., and in a most offensive manner. Yet the manufacturers of these preparations still have the audacity to ask the medical profession to recommend their nostrums and their unethical and improper preparations. Bribery, in the form of "samples," "presents" in the shape of paper-weights, calendars, penholders, etc., is also employed and probably reaches a certain number. But these things are not right; they are not even decent. If a manufacturer has a good and worthy preparation to present to the medical profession he may do so in a proper, decent and dignified manner, using honest and proper means of advertising the merits of his preparation to the profession. Why should medical men submit to be rivals of the billboard and the fence, or to be the dumping ground for the lies, either written or printed, which unscrupulous foisterers of nostrums, patented worthless preparations, etc., may choose to unload upon them? Samples are, as a rule, either used to experiment upon some charity patient or are sold to ignorant patients; either procedure is to be most strongly condemned as improper and unethical. Let us by all means strive to put a stop to this prostitution of our profession. The sign on the doorstep which reads, "No peddlers or agents wanted!" applies, in my estimation, to all "detail men," "special agents," and others employed to disseminate this sort of trash, and I invariably call their attention to this interpretation. Unquestionably there are reputable manufacturers doing business in a proper manner, and doubtless represented by well-educated and reputable "detail men"; but they must suffer for the sins of the great majority who certainly could not be included in this class. If they slightly modified some of their methods and then exerted their great

influence, this better class of manufacturers could do much to restrain the irresponsible class from using these many improper advertising methods.

Very truly yours, DUDLEY TAIT.

Discussion of Dr. Sherman's Paper, August Journal, Continued.

To the Editor of the State Journal: — There are some things to say in reply to Dr. Tait's letter which appeared in your Journal of last month. In the first place, I am not at all interested in the personal invective indulged in by Dr. Tait, nor do I intend to retaliate along that line. When one is attacked personally in public, it is necessary to defend oneself, and that is all I wish to do.

Now for the argument. Dr. Tait says he "endeavored to call attention to two distinct points. First, the necessity of rigorous methods in order to avoid errors in diagnosis from contamination." He then says "that to submit a specimen to a long journey prior to subjecting it to culture is not in accord with the precision demanded by modern bacteriologic methods." This objection has already been answered. The specimens sent twice to the laboratory were well protected, being wrapped in many layers of sterile gauze, and then surrounded by gutta percha tissue. Mere length of journey is no argument as to contamination. It is the way in which the specimen is protected that counts. It is quite possible to get a large amount of contamination by carrying an open basin from an operating room through a dusty hospital hall to a laboratory; whereas, on the other hand, some manufacturers ship quantities of sterile Agar Agar culture tubes to California and I have never seen one of these contaminated. Instances of this kind might be multiplied to show that mere length of journey is not the factor to be considered.

Dr. Tait continues: "I further remarked that the first indispensable step in all bacteriologic diagnosis consisted in making a smear for direct examination." As a matter of fact the Doctor did not make that remark to my knowledge. Had he done so, or had he asked what had been found upon the smears, my attention would have been called to the point, and I could have told him that a smear had been made. This rule is so simple and so important that any one who has any laboratory experience at all does it as routine; and it is a routine for all specimens sent to my laboratory—though I find that when the clinician makes the culture I never receive a smear. Now for the findings on the smear. There were present many pus cells and detritus; no bacteria seen. When we remember the comparatively few colonies which developed in culture, we can see the reason why none were found on the smear in an ordinary examination.

The remark which Dr. Tait did make was the following: In citing a hypothetical case he said, "If, for example, we take a specimen of pus from an acute otitis or a marked appendicitis, and examine immediately with or without stain, we shall notice an extreme variety in the morphologic aspect of the specimen." Upon culture of this pus on the ordinary media we shall be surprised at the enormous disproportion between the abundance of microorganisms found upon direct examination of the pus and the small number of colonies developed." This statement as it stands might be criticized severely. It is not of universal application to cases of marked appendicitis. Some cases of appendicitis showing numbers of microorganisms upon smears, show also an enormous number of conglomerate colonies upon cultivation on the ordinary culture media, even after a short time in the incubator.

Now, as regards Dr. Tait's further contention: "If no bacteria be found (on smears), cultures may be dispensed with." This is an error so glaring that any one who has any laboratory experience at all will immediately recognize the falsity of the statement. In proof of this I might state a few well known facts: It is very unusual to find bacteria on smears made from the blood in such diseases as typhoid fever, whereas it is a common occurrence to obtain these bacteria from the blood by means of culture. Also, I might mention what is familiar to all laboratory workers: That often in cases of tubercular serous effusions, one might spend hours and even days looking for the tubercle bacillus on smears without finding one, whereas, using the peritoneal cavity of a guinea pig as a culture tube, so to speak, and injecting a quantity of the fluid, one will get results in a few weeks by the development of tuberculosis in the animal.

To consider further Dr. Tait's letter: He says, "the first indispensable step in all bacteriologic diagnoses consisted in making a smear for direct examination." Had Dr. Halton pursued this well-known laboratory method all criticism and discussion would have been avoided, for no one denies the pyogenic properties of Friedlander's bacillus.

Compare this with Dr. Tait's contention in his previous communication: "Dr. Sherman's findings are certainly interesting, and I beg to remind him that with the aid of modern laboratory methods his conclusions might have been, or rather most probably would have been, entirely negatived." One month ago Dr. Tait thought that Dr. Sherman's results "most probably would have been

entirely negative" despite the fact that he knew that an agglutination reaction had been obtained with the patient's serum and the Friedlander's bacillus. This month he is willing to acknowledge that "no one denies the pyogenic properties of Friedlander's bacillus," and that criticism and discussion might have been avoided had a cover-slip been examined. These statements are, to say the least, somewhat incompatible.

With reference to the silence of American writers on the subject of the anaerobic bacteria, and my claim that their silence was probably due to negative results obtained, I would like to call attention to the fact that it was an American observer, Dr. William H. Welch, who first discovered and described the important anaerobe, the *Bacillus Aërogenes Capsulatus*, the bacillus of emphysematous gangrene. The following year Frankel confirmed his work and since then it has been corroborated by a host of observers, I would also like to call attention to the well-known fact that Dr. Welch is at the head of the pathological department of Johns Hopkins, an institute of whose work Americans may well feel proud; and though Dr. Tait claims that there is an "absence of complete bacteriologic diagnostic methods" in this institution, we have to thank it for some very valuable bacteriological discoveries during the past few years, among which stands prominently the splendid work done on the causation of tropical epidemic dysentery, and the putting of that disease on a sound etiologic foundation.

Also of American institutions Dr. Tait attacks the Massachusetts General Hospital. This institution also has done some creditable work. Dr. Wright's papers published during 1900 and 1901 would indicate that some work was done with anaerobic bacteria. "A Simple Method for Anaerobic Cultivation in Fluid Media," by Dr. James H. Wright, *Jour. Boston Soc. of Med. Sciences*, Vol. IV, No. 5, *Centralblatt für Bact.*, Vol. XXVII, No. 2, "A Method for the Cultivation of Anaerobic Bacteria" (*Centralblatt für Bact.*, Ed. XXIX, No. 2, 1901).

We might come nearer home and find further proof that the anaerobes are not always ignored. In a paper entitled "Acid Proof Bacilli in Five Cases of Pulmonary Gangrene," *Jour. Med. Research*, Vol. VIII, No. 1, Dr. Ophüls of Cooper Medical College demonstrated the presence in numbers of an acid proof bacillus resembling *B. Romesius* of the French writers; but this bacillus did not grow under anaerobic conditions. (Once it grew for a short time under anaerobic conditions.) Nor did any other anaerobe grow in his cases.

As regards the anaerobes: It was Pasteur, I believe, who first succeeded in demonstrating that putrefactive processes are due to anaerobes.

During the last few years Veillon and others of the French school have studied the presence of anaerobes in processes of a fetid and gangrenous nature.

As stated by Rist in a review of the work of these observers:

"Durch diese Experimentalergebnisse belehrt, machte nun Veillon die Hypothese das bei allen fôtiden und gangränösen Prozessen anaerobe Bakterien thätig sind" (*Centralblatt für Bact.*, 1901, p. 290).

"Instructed by these experiments, Veillon established the hypothesis that in all fetid and gangrenous processes anaerobic bacteria are active."

It is still a question how great is the part played by the anaerobes in the causation of these fetid and gangrenous processes. They are found in almost constant association with a known pathogen, and this complicates the question. The cases in which they have been found alone are still too few for definite conclusions. As Rist himself says in his review of this work:

"Die Wichtigkeit ihrer Rolle dürfte aber nur durch zahlreiche systematisch durchgeführte Untersuchungen festgestellt werden." (*Centralblatt für Bact.*, 1901, p. 290.)

"The importance of their role can be substantiated only by means of numerous systematically conducted experiments."

The mere predominance of the anaerobes in the pus of some cases is not proof of their primal pathogenicity. There is always more or less dead organic matter in pus, and this would afford good culture media for saprophytes. The very quotation to which Dr. Tait gives weight may be taken as evidence that the anaerobes follow on a pathogenic process already established, and that their role is secondary: "The later the surgical intervention the more varied the bacterial flora of appendicial pus."

It may be, as has been suggested, that in those cases in which a known pathogen is found with an anaerobe, that the pathogen and the anaerobe act conjointly in such a way that the known pathogen produces necrosis and injury to the tissues to such an extent that the more or less saprophytic anaerobe can develop in them and assist in producing the fetid and gangrenous lesion.

As far as the experiments on animals go, several objections might be raised, among which I might state the fact that numbers of bacteria, which are pathogenic for animals are not pathogenic for man.

But all this argument has nothing to do with the case in hand. Dr. Sherman's case, as I said before, does not come in this category, being not of a gangrenous nature, and as I should have said, not fetid. Among Veillon's own 22 cases of appendicitis, which he examined for an-

aerobic bacteria, there was one—a very mild case—in which he found only the pneumococcus. This case was similar to ours.

Again, we have Rist's opinion: "Clinically, I think that the presence of anaerobic germs in pus points to a severe form of infection" (*Br. Med. Jour.*, Oct. 12, 1901) whereas, our case was a very mild one.

As regards Dr. Tait's contentions about belief in sterile pus: Dr. Tait claims that through the observations of Veillon and his co-workers in finding the anaerobes in pus: "Belief in the frequency of sterile pus has been shattered." Just three paragraphs before this remark Dr. Tait is seemingly advocating a theory of the existence of sterile pus himself: "making a smear for direct examination. If no bacteria be found, cultures may be dispensed with."

MARY HALTON.

The Proper Spirit—The New York Obstetrical Society, one of the most famous and useful of the older organizations in this country, was limited by its charter to 15 members. When five, eight or ten congenial medical spirits get together and fail to have an interesting and instructive meeting it is not the fault of those who are absent. One of the most useful societies the writer has ever known was organized by him on a chance visit in a county containing but four physicians. They were torn by the usual wrangles and dissensions, and the profession was at a low ebb. Three of them were comparatively young men, and after getting together in their society, and understanding each other, one after the other in turn went away for post-graduate work, the others dividing his work and giving him the proceeds. One of them had a taste and ability for surgery, and by an equitable and satisfactory arrangement he did that part of the practice which had formerly been sent away or been done by surgeons called from a distance, at far greater expense and probably no better results, or more frequently the cases were left to suffer and die without attempt at relief. Under better business methods a large element in the community which had found it cheaper to change physicians than to settle their accounts, although abundantly able to do so, were induced to contribute their part to such a support of the profession as enabled its members to qualify and equip themselves for the benefit of these as well as their more honest neighbors. This society was as much a blessing to the people of that community as to the profession, and organized and conducted in the proper spirit this will always be true.—J. N. McCormack, in *Journal A. M. A.*

Antenatal Rigor Mortis—Two cases are reported by Paddock and others referred to in the literature. He supports the probability of rigor mortis occurring in the fetus by the animal experiments of Tissot, showing conclusively that such a condition does exist. From a medico-legal standpoint it must be admitted that it can occur before birth as well as after. The existence of a new-born dead infant in rigor mortis is not a necessary proof of a life apart from the mother, but it does prove that the fetus was alive shortly before or during birth. The condition often complicates delivery by interference with its normal mechanism.—*Journal A. M. A.*

Dr. J. H. Musser, Philadelphia, wishes to warn the profession concerning a young man who pretends to be his nephew and on various pretexts secures money—mostly from Dr. Musser's personal friends. Dr. Musser has no nephew by the name of Musser, and knows of no one who dares use his name in any scheme whatever. Mr. P. Corzilius, representing the American Medical Association, has a letter from Dr. Musser, as well as other means of identity for the purpose of carrying on his work. Dr. Musser wishes other journals to circulate this warning.

OREGON STATE MEDICAL SOCIETY.

THIRTIETH ANNUAL MEETING.

Reported by PHILIP MILLS JONES, M. D.

The 30th annual meeting of the Oregon State Medical Society was called to order at 10 o'clock on the morning of Tuesday, September 29, by the President, Dr. H. W. Coe. The sessions were held at the Elks' Hall, Portland, and were well attended. The house of delegates met at 9 in the morning and the general sessions at 10. This hardly gave the delegates sufficient time in which to transact the business of the society, and some things were passed over which should have received more attention. On the whole, and with this exception, the meeting was generally regarded as very satisfactory and the operation under the reorganization plan, which it initiated, was looked upon with favor. The following program was presented and all of the papers save four (which are indicated) were read and generally discussed:

Annual Address by the President, Henry Waldo Coe, Portland; Address of Welcome, Mayor George H. Williams; Report of Chairman, Board of Council, Calvin S. White, Gervais; "Osteomyelitis, With a Report of an Unusual Case," Joseph S. Courtney, Dayton; "The Higher Education a Cause of the Physical Decay of Women," F. W. Van Dyke, Grants Pass; "Technique in General Anesthesia," Joseph Sternberg, Portland; "Some Observations on the Arid Region," Franklin Cauthorn, Portland; "Tuberculosis," Edward A. Pierce, Salem.

X-ray Symposium—"What is the X-ray?," Richard Nunn, Portland; "Technical Management," George E. Houck, Roseburg; "Diagnosis of Fractures," George F. Wilson, Portland.

Therapeutics—"Cancer," Robert C. Coffey, Portland; "Skin and Glands," Luther H. Hamilton, Portland.

Nervous and Mental Diseases—"The Paranoiac," Walter T. Williamson, Salem; "The Neurasthenic," J. Allen Gilbert, Portland; "The Pervert," James P. Tamiesie, Hillsboro; "The Syphilitic," William House, Pendleton; "The Tubercular," Woods Hutchinson, Portland; "What Can We Do For Them?" John S. Klobner, Green River Hot Springs.

Kidney Symposium—"Modern Methods of Diagnosing Kidney Disease," Albert E. Mackay, Portland; "Dietetic Treatment of Various Forms of Kidney Disease," Charles J. Smith, Pendleton; "Drugs Used in the Various Forms of Kidney Disease," James F. Bell, Portland, (read by title); "The Pathology and Treatment of Tubercular Kidney," James B. Egelson, Seattle (read by title); "Causation and Pathology of Chronic Bright's Disease," Woods Hutchinson, Portland; "Pyelitis," William H. Byrd, Salem (read by title); "Renal Calculi," William

Jones, Portland (read by title); "Anuria," Park Weed Willis, Seattle; "Indications for Nephrectomy," Kenneth A. J. Mackenzie, Portland.

The President did not make an address of the usual sort, but simply outlined the work of organization along the lines proposed by the A. M. A., and pointed out how very desirable it was to have everything so arranged that the county society would dovetail into the State Society, and it in turn into the A. M. A. He then introduced the Mayor of Portland, Mr. George H. Williams, who extended to all a most cordial greeting to Portland and congratulated the society upon its work and its showing. He gave an outline of medical work and medical progress, as it came within the view of a layman, and called special attention to the ever-increasing efforts of medical men for prevention of disease as well as in its cure.

Dr. Calvin S. White reported for the Council and said that body had had two meetings, on July 26 and September 29, and had accepted in affiliation with the State Society the following county and district societies: The City and County Medical Society of Portland, Eastern Oregon Medical Society, Southern Oregon Medical Society, and the Lane, Yamhill, Marion and Clatsop County Medical Societies. The Council granted one year for all members of the State Society who were not members of these component societies to join one of them.

On motion of Dr. Franklin Cauthorn, a committee of three was appointed to take in hand the matter of securing subscriptions to a fund to be raised for the purpose of erecting a monument to the memory of the late Dr. Walter Reed. Drs. Cauthorn, Wheeler and Fulton were appointed on the committee.

The first paper of the meeting was read by Dr. Joseph S. Courtney, on "Osteomyelitis." In his opinion the subject, a large and exceedingly important one, did not receive sufficient consideration at the hands of writers in the medical press. Such reports as printed were generally incomplete. In the past 12 years he had seen 17 cases of this disease, and in his opinion the cause in 75 per cent of the cases, at least, was traumatism; tuberculosis and typhoid were also to be reckoned with as causative factors. He mentioned one patient who developed this disease six years after recovering from typhoid, and the typhoid bacilli were to be found in the pus at the site of the disease, which was in the tibia and fibula of one leg. All of the 17 patients seen by the writer were boys, in age from 8 to 17 years. He dilated on the fact that the disease was found very much oftener in boys and men than in girls. It is

frequently due to injury by puncture, as in the penetrating wound of a shot, in which case the entire medullary canal will very quickly become involved and the disease rapidly terminate in the death of the patient. The amount of pain is not an index of the extent of involvement, but is fairly diagnostic of the condition. There is a continuous aching and a feeling as though the bone were being crushed. The pus is at first clear, but turns greenish and bad smelling as the disease progresses. Pyemia should always be looked out for, and guarded against if possible. As to the treatment, there seemed to be a difference of opinion as to the desirability of very early operative interference. In his opinion the earlier the operation was performed the better was the outlook for the patient. A thorough operation was the only thing to be considered. Make an ample wound and fully inspect the bone at the site of the trouble and in the vicinity. Make free use of the bone drill and the chisel and get away all the diseased tissue. Amputation in the continuity was bad treatment; disarticulation at the nearest joint was better if the condition necessitated such an operation. The case recited was that of the occurrence of the disease in the heel of a boy 13 years of age. The boy struck his heel on a rock and almost immediately experienced violent pain; this subsided for 12 hours and again appeared, not to leave. He was seen by the writer 72 hours later, when the temperature was 99.3-5 and the pain so intense that one-half grain of morphin hypodermatically had but little effect. The next day he operated, but there was nothing to be seen save some redness and increased vascularity. After 36 hours thin pus appeared, which subsequently turned to a greenish color. Calcium sulphite was given freely. Pain continued and ten days later a second operation was performed, at which time a section of the os calcis was made and almost all of the bone except the articular surface removed. It was well scraped and packed with iodoform gauze. It is now four months since the operation and there is little impairment of function, and the heel has filled out so that the original shape is nearly restored.

Dr. K. A. J. Mackenzie opened the discussion and said that he considered typhoid quite as important in causation as traumatism or anything else. In many cases the cause was hard to explain, though it undoubtedly must be due to pus organisms, as are other infections. In many cases it is difficult or impossible to show that traumatism has played any part whatever in causation. In 75 per cent of cases it seems to be confounded with rheumatism. The first doctor who sees a case of this disease generally determines its end; for if he makes the proper diagnosis at once, and early, there is good chance for recovery following operation. But if the diagnosis of rheumatism be made and the patient allowed to drag along until the disease is far advanced, there can be but little hope for the patient's life. In ad-

vanced cases even disarticulation was followed by a high mortality, and sometimes radical operation on the site of the disease seemed to have a better result than disarticulation. Slit the shaft and treat as a large open wound, allowing for ample drainage. The proper making of an early diagnosis is by far the most important point to be raised. This is considered difficult for the reason that the disease generally appears near the end of a long bone, near a joint, and is confounded with rheumatism.

Dr. George Wilson called particular attention to the wrong diagnosis of rheumatism in these cases. Rheumatism should be forgotten and osteomyelitis always suspected in all cases in children where pain near a joint is found, for rheumatism is practically never localized in one spot. There is but one thing to do, and that is to operate at once. Cut down, incise the periosteum, and if there is not relief at once, open into the bone until you find the trouble.

Dr. Andrew C. Smith stated that one of the first papers read before the society, now many years ago, was one by himself calling attention to the importance of this disease and its careful consideration. In his opinion this is one of the most important diseases which medicine has to deal with. Too often the condition is wrongly diagnosed as rheumatism and the child treated for that until his life is sacrificed or he is crippled for life. One should never think of rheumatism in a child; think always of osteomyelitis until it is absolutely disproved. Severe pain in one end of one long bone always means osteomyelitis and nothing else, and in the name of the Continental Congress and the great Jehovah, he could not see why so many fatal mistakes were made. He maintained that there could be no such thing as symptomatic treatment; there could be but one treatment—operate at once, without waiting for anything. If necessary, cut down with a jack-knife and open into the bone with a gimlet, but do it at once; delay is fatal. In his opinion too much had been said about traumatism. Pyogenic infection, carried in the blood and lodging in the terminal vessels where congestion resulted from a slight blow, was probably the cause; the traumatism might be insignificant and impossible to determine. With pain at one end of a long bone and an immobile limb, don't wait for anything; make the diagnosis at once and operate at once; it can be nothing but osteomyelitis. He disagreed in the matter of the proper operation in advanced cases. Amputation through the diathesis was better than disarticulation, he thought, and then thorough cleansing of the medullary canal should follow at once. While the subject is an old one, he thought it should be brought up at every meeting and discussed at length. He cited the case of a child that had been treated for rheumatism for weeks by a man who claimed to be a surgeon, when the diagnosis was finally made it was too late.

Dr. Yocum of Tacoma raised the important point of insisting that the parents agree to any operation thought necessary, for often the condition was found at the time of operation to be more serious than had been thought. He mentioned a case that had been diagnosed as osteomyelitis, but on operation was found to be carcinoma; no permission to amputate had been secured and the operation had to be abandoned.

Dr. R. C. Coffey agreed that there was but one treatment, operation, and that the failure of diagnosis should not so often occur. He considered traumatism, though a small factor, of great importance.

Dr. George E. Houck recited a recent case of double osteomyelitis in the ends of both tibia and ankle joints that had been diagnosed and treated as rheumatism. Free incision gave immediate relief. Con-

servative surgical treatment was being pursued and the patient was improving.

Dr. J. G. Courtney closed the discussion by saying that he only waited ten days for the second operation because he could not sooner persuade the parents of the child to have it done. He said that he must maintain the fact that traumatism, at least in all of his cases, was the causative factor. He thought treatment directed to prophylaxis was warranted under the evidence of frequent pyemia.

The second paper was by Dr. F. W. Van Dyke, on the subject of "Higher Education of Women Being a Cause of Their Physical Decay." In his judgment, while the causes were many, certainly the rushing process during the years when a young girl is developing into a woman, when the strain upon her nervous system should be the least, and generally is the most, is the main cause for poor development. Too much time, money, strength and nerve energy are wasted in wholly useless studies.

"No girl is considered cultured unless she has broken her health down trying to learn music, Sanskrit root, Browning and Emerson at some fashionable female college. Of all these products of the higher education or culture—call it what you will—about one-fourth marry and produce one and one-quarter children each, showing how merciless nature is in her effort to eliminate the unworthy. At a time when they should be in the open air playing, or at least studying within their limits, girls of a tender age are forced to the utmost effort they are capable of, for unfortunately the curricula of all schools, colleges and universities are no longer constituted to fit the average pupil, but the talented." After pointing a moral of statistics of would-be musicians, he said: "Not one pupil out of 500 can play *Hiawatha* correctly. Every physician knows that the cramming process in the vast majority of cases, when applied to mediocrity, is the cause of hysteria, neurasthenia, dyspepsia and astigmatism." He dilated on the bodily imperfections resultant from over ardent pursuit of knowledge; he spoke of the meager breasted, the ugly, the chilly-hearted, and denounced the modern priestess of the muses as an anomaly not to be got rid of any too quickly. "Confinement in school and hard study takes away desire from woman and that physical beauty so attractive to men. Imagine, if you can, a novelist writing in this vein: 'She was pale, thin and plain-looking, with a peevish temper caused by ill health, but Armand loved her devotedly, passionately, though lacking youth and beauty and being of a cold nature, for great was her knowledge of theosophy, the lore of the ancients, and differential and integral calculus.' Why, even Marie Corelli wouldn't think of a man falling in love with such a heroine.

"It is not to be assumed from this paper that the sole object of a woman's life is to marry and raise children, nor should she be brought up in ignorance. A woman with talent or genius should have it developed to the fullest extent, but the constant effort being made to make ordinary ability keep pace with well-defined talent is predestined to failure."

He denounced the modern methods of marriage as calculated to increase a race already degenerate enough and said that the only marital happiness was that due to the union of two healthy people. He ended: "Penelope, the faithful wife, Cornelia, the proud mother whose children were her jewels, Thucydides, the ideal of the ancient Germans, and St. Elizabeth, the personification of Christian faith and charity, knew nothing of soul yearnings, telepathy, psychology and other useless things, but they possessed those womanly qualities which have sent their names down the ages and will continue to do so until the

name of the last graduate of Wellesley, Vassar and Bryn Mawr shall have faded from the recollection of men forever."

Dr. Mae Cardwell opened the discussion on Dr. Van Dyke's paper by saying that the matter was certainly of the first importance. She disagreed with the writer in thinking that higher education had much to do with lack of proper development, and called attention to the fact that the forcing process referred to occurred generally before higher education was thought of, and while the child was in school. Girls between the ages of 11 and 13 should have plenty of play, outdoor exercise, etc.; but as a matter of fact they are usually in school at this time, climbing stairs, leaning over desks, and getting but little good fresh air. They get headachy, nervous, fidgety and do not properly develop. They are apt to suffer from menstrual derangements from the first, and by the time they reach the "sanskrit root" stage of education, the harm is done. As to the many evils of improper pelvic development, she called attention to the fact that difficult labors, lacerations, etc., are common to savage tribes and that forceps were invented before higher education was thought of. She thought a study of music a good thing, and while not denying the existence of sex attraction, she thought that other attractions should not be forgotten, and among these certainly a proper education was a prime requisite.

Dr. J. A. Fulton expressed his opinion as being somewhat at variance from that of the writer. He thought lack of proper exercise at the period of development was the main cause and that higher education had little to do with it. The boy is taught to play out of doors, but the girl is prevented from doing so and is taught to play with dolls, learn music, whether she has any ability or not, and is generally prevented from leading the healthful out of door life that she should, during the years of pelvic development especially.

Dr. Woods Hutchinson thought such questions should certainly be brought up and discussed at medical society meetings, for a proper understanding of them by physicians is very desirable. He denied absolutely the question of physical decay. In his opinion woman was a better physical animal now than ever before; instead of deteriorating she was developing. Neither male nor female of the human race showed any signs of physical decay; rather the reverse. Too much time devoted to music and fancy work to the injury of the girl by depriving her of sufficient outdoor exercise certainly must be deplored. As to sex attraction and its possible loss through study, he could not agree. Certainly it existed and was to be reckoned with. Many centuries of generations had lapsed in the building up of sex feeling in the female and he doubted that a few generations of study could destroy it. Unhappy marriages exist, and have always existed. In England, where divorce is almost unobtainable, they are most common. Divorce should be made easier and it should be resorted to more early and before children are born into unhappy households.

Dr. Van Dyke closed the discussion by calling attention to the fact that higher education, according to the title of his paper, was "a" cause and not "the" cause.

"Technique in General Anesthesia," by Dr. Joseph Sternberg, was the next paper read. The writer made a strong plea for a careful study of the question and the necessity for securing a proper knowledge of the physiologic action of anesthetics before undertaking to use them. The general practitioner is not a good man to give an anesthetic, because he does not know enough about the subject. In all

cases the patient should receive a thorough examination. If possible the anesthetic should be given on the operating table, and not in some other room. If the confidence of the patient is first secured and proper suggestion made, the anesthetic will be more easily taken. The patient should not count and the anesthetic should be given slowly. The anesthetist should carefully watch the expression of the face and so avoid irritating the air passages by giving the anesthetic too rapidly. Pure ether should never be given; air should at all times enter the lungs. The object should be to give as little as possible. All patients do not require the same amount and each patient should be studied by himself. He pointed out the various signs and indications that should be watched for. Respiration, auditory impressions, pulse, heart action, color of the face, eye reflexes, etc., dwelling on each and giving it its due weight. He thought anesthesia should never go beyond the point where the pupil reacts to the first incision.

Discussion was opened by Dr. A. E. Burns, who said that he thought the subject of the first importance. He had seen patients pass away when he was sure it was due to too much anesthetic, or an anesthetic improperly given. The subject should be carefully studied by the man who gives anesthetics.

Dr. Andrew C. Smith considered that too much importance could not be placed on the desirability of giving the anesthetic on the operating table. Valuable time is lost in moving the patient from another room or another floor.

Dr. J. A. Fulton thought that too many operators lost valuable time in talking, etc., after the patient was anesthetized. The patient should be under the anesthetic for the least possible time.

Dr. H. W. Cardwell said that when he was an interne and was expected to give anesthetics he first studied the effect upon himself. With other internes around, he proceeded to lie upon a table, plug one nostril and insert a tube from the ether bottle into the other. At the end of fifteen minutes he was in a condition of surgical anesthesia, as indicated by all the classical signs, yet he was fully conscious of what was said and done around him. He called attention to the fact that operators should be very careful of what they said and did when they thought the patient fully anesthetized, for the patient might be able to hear and shock might be caused by this fact. He recalled many cases of shock that could not be explained and it might have been due to the patient hearing something that had been said as to his condition.

Dr. J. S. Klover thought that often the patient's strength could be conserved by beginning with nitrous oxid and following up with ether or chloroform. When possible the stomach should be washed out before the anesthetic is given, and thus nausea prevented. He had found that hot water irrigation in the stomach during an operation would often be a great help and that very weak patients could be operated upon if this procedure was employed.

Dr. Robert C. Coffey considered the discussion of this subject of the greatest value. The patient's face should be carefully watched. The anesthetist should be a specialist and should be most carefully trained in his work. He said he had to give an anesthetic a short time before and did not know the condition of his patient when under. He felt his own inability and suggested the dangers that might ensue when the anesthetic is given by a man who knows little or nothing about it.

Dr. J. A. Pettit said that it was all right to say that a specialist should always give the anesthetic, but very often a man had to give it himself. He had to depend on the best available, and specialists in this line are scarce in country districts. He considered

the gaining of the patient's confidence the most important thing, and suggestion would do a great deal in relieving shock.

Dr. Franklin Cauthorn said that there was danger in such discussions, for while there was undoubtedly a place for the specialist in anesthetics, still doctors had to get along without them in a majority of cases, and they should not be scared from doing so by looking too much at the dangers. He had abiding confidence in the good common sense of the average general practitioner, and he knew that men all over the country were every day giving anesthetics without bad effects. Realize the dangers, but do not fear them, should be the word to every physician. Disaster is apt to come in the early stages and without warning; no amount of care seems to prevent these catastrophes.

Dr. H. W. Cardwell said that accidents in the early stages did not come without warning if a man knew what to look for and how to guard against it. A man to be a competent anesthetist should study the language of his subject, and learn to rightly read the signs that nature puts out. If he knows his subject he can prevent 999 out of 1000 accidents, for he will see them coming.

Dr. B. A. Cathy said that the general practitioner in a small place could never have an expert anesthetist at hand and had to give his own anesthetic. Great care should be taken, of course, but with care there is little danger in giving an anesthetic.

Dr. H. A. Kissam considered idiosyncrasy an important matter and not to be disregarded. Some sudden deaths he placed at this door. The danger signs should be carefully studied by all, but they should not be given too much weight; in general the use of an anesthetic is not accompanied with much danger.

Dr. E. P. Gerry accentuated the importance of suggestion, calling attention to the fact that suggestion alone is sufficient in some instances to place the patient in a condition to be operated upon, and if combined with an anesthetic, is of inestimable value.

Dr. W. B. Morse said that it was all right to have a specialist if possible, but that it was more often impossible. When there is something to be done, do the best you can. He had made use of all sorts of assistants in giving an anesthetic, including Indians and Chinamen, and with good results. One should never refuse to do anything indicated just because there is no expert handy.

Dr. Sternberg, in closing, said that he did not go much on idiosyncrasy, and that most deaths assigned to this cause were due to lack of information on the part of the man giving the anesthetic. If the anesthetist is properly posted he will see what is coming and avoid it. It is very seldom necessary to give atropin if the anesthetic is properly handled.

Dr. Franklin Cauthorn, of the special committee on the Dr. Reed memorial fund, reported that the committee had drawn up the following preamble, and would be pleased to have the members subscribe to it during a recess:

We, the undersigned, agree to pay the respective sums set opposite our names, for the purpose of erecting a monument to the memory of the late Dr. Walter Reed, U. S. A., the distinguished American physician whose discoveries in connection with the subject of yellow fever have shed such luster upon American medicine and have conferred and will continue to confer such untold blessings upon humanity.

He said that the profession of Oregon should, at least do something, even if it were no more than to place one brick or one stone upon the monument to such a noble man.

"Some Observations on the Arid Regions," was the title of the next paper, read by Dr. Franklin Cauthorn. He had spent three and a half years in the arid regions of the southwest and had studied them

carefully. Too little information was possessed by the average physician who sends his tuberculous to Arizona or the southwest, without specifying what portion was best adapted to the individual patient. The first impressions of the country were apt to be unpleasant, and the physician should therefore impress upon the patient that the struggle is to be a long one and that he must have lots of patience.

After staying a while most people grew to like the country and the feeling of desolation leaves. Some patients felt this so keenly that they would rather go home and die than stay and get well. The principal feature of the country is the ever-present sunshine. The climate varies much in different localities, but the winters, as a rule, are cool, and in some places cold. Almost any altitude, from sea level to 4000 feet or higher can be secured. The place selected should be sheltered from winds, which in some sections are strong and unpleasant. Some parts of California are indeed warmer and more arid than Arizona. The heat is not objectionable, for, in the words of a resident, "It don't do 'em any harm to sweat." The climate acts in two ways; it discourages the growth of bacilli and it helps to build up the resisting powers of the patient. Physicians should always say where the patient is to go, and should never send hopeless cases away from home to die, alone and in a rather depressing place.

Dr. Harry Lane opened the discussion and said that while he had been sending patients to Arizona for some time, he had only recently seen it himself. And he was not at all impressed with what he had seen. He visited the Army Hospital at Silver City, but the trouble with it was that soldiers were not admitted till after they were discharged and so there was no control over them; as soon as they felt a little better they ran away. Statistics from there are consequently unreliable. He thought the country lonesome, the food bad and the place generally uninviting. Many places are very windy and the wind blows forty miles an hour all the time. Much trouble arises from patients not staying where you send them. If you send a patient to Tucson, he goes to Phoenix, or vice versa. The climate is probably good, but it is difficult to get patients to do what you tell them and to live as they should.

Dr. C. J. Smith thought that too little study had been given to the climate of eastern Oregon, where there was much arid country and the climate was excellent. Altitudes ranging from 300 to 5000 feet were to be found there and many places sheltered from winds were available. He also complained that physicians were too vague in their directions. Patients were sent to "eastern Oregon" without any directions as to what part; and it is a large section.

Dr. J. D. Courtney asked whether the climate of the southwest was good for patients in the stage of hemorrhages, and whether the altitude had any injurious effect in such cases.

Dr. W. O. Spencer called attention to the advantages of eastern Oregon, its arid condition and light rainfall.

Dr. A. E. Burns thought that patients needed a good deal of looking after in the matter of detailed instruction as to the proper mode of life, advice, etc. He also thought that too little attention had been given to the fact that it is very important to keep them occupied and amused.

Dr. K. A. J. Mackenzie said that he had been sending patients to various parts of the Coast, including eastern Oregon and California, but that he never saw any particular good results until he commenced sending his patients to specified parts of southern Arizona. No patient that he had sent there failed to improve and most of them underwent a complete arrest of the disease. He did not think it safe to

call them cured, but the disease had stopped. The dryness and the outdoor life, together with proper exercise, he considered the prime factors in securing the desired result. Probably any place that showed the same number of hours of sunshine per year and the same dry air, would also show the same number of great improvements.

Dr. Cauthorn said that Dr. Lane was a good example of the depressing effect of the country at first; later one got over that feeling. Isolation is very trying and may be bad for some patients. Advanced cases should never be sent there to die. Altitude did not seem to predispose to hemorrhages, nor to have any injurious effects in that direction.

The X-ray symposium was opened by Dr. Richard Nunn, with a paper on "What is the X-ray?" He said that we do not know anything about it absolutely, but only relatively. He went over the physics of matter and force and of radiant energy, discussing the ionic charge of atoms, etc., and indicating his belief in the existence of one ultimate form of matter, just as there is one ultimate form of energy.

"Technical Management of the X-ray" was presented by Dr. Geo. E. Houck, who dilated upon the mistakes liable to be made and how to avoid them. He exhibited a number of skiagraphic plates and prints indicating various points raised in the paper. In his opinion the best apparatus to be used was a proper induction coil and a good mechanical interrupter. He objected to tubes being described as "hard" or "soft," and thought each tube should be described by indicating the length of spark it would pass. As patients become a source of radiation after a while, too long an exposure should not be given; the plate should be intensified in order to get the proper contrast. The points to be accentuated were, first, fix the apparatus; second, adjust the tube for the effect desired; third, fix the distance of the tube from the part to be examined; fourth, give the proper exposure; fifth, develop the plate yourself, and sixth, expect plenty of failures, but keep trying.

"Diagnosis of Fractures by the X-ray" was presented by Dr. Geo. F. Wilson, who showed a large number of very fine skiagraphs of difficult and complicated fractures. He said that it was almost an essential to develop your own plates and know just what you were doing. Heretofore there has been much faulty diagnosis of fractures and probably many cases of malpractice have had some grounds. With a proper X-ray examination no such complaint should exist. It should be used clinically just as much as a thermometer. Comparisons with normals are essential, for we are dealing not with a picture of a thing, but with a shadow of the thing, and it must be known how the shadow of the normal part looks. Skiagraphs are apt to be deceptive unless the normal is known and the relations of the tube to the part at the time the exposure was made. Skiagraphs taken at right angles are very valuable and often disclose a condition that would not be discovered if but one were taken. Proper skiagraphs have shown that almost any form of comminution may be taken care of if carefully studied by the X-ray before and after operation. The surgeon has certainly not done all for his patient unless a thorough X-ray examination has been made.

Another paper on the same subject was presented by Dr. George E. Houck, who emphasized what had been said and called attention to the value of this examination in children, and to the importance of a careful study of the shadows of normal bones in their development. In many cases of fracture or injury to the joints of children, the diagnosis had been improperly made; with the X-ray there was no excuse for this. He thought it time to dismiss the idea that the X-ray was a plaything and to understand

that damage suits may properly result if it has not been used when at hand.

"The X-ray in Cancer Treatment" was presented by Dr. Robert C. Coffey, who made a careful resume of what had been done and published in this direction. Early recognition and immediate operation was unquestionably the only proper treatment for cancer. But when the condition is far advanced and operation is doubtful or impossible, then it is proper to make use of X-ray exposures and to expect good results in some cases. It is also a valuable procedure following an operation. His findings were much like those of Coley's in that an advanced cancerous growth either quickly improves or is rapidly made worse by exposure to X-ray influence. He recounted three cases of cancer in which the patients had been materially benefited or entirely relieved by X-ray exposures alone, or following extensive operation. One case had become more complicated through the rapid increase due to metastasis. One patient had sarcoma of the rectum, seven inches from the anus. It was removed as well as possible and the patient subsequently exposed to X-ray influence; apparently cured. Another patient had malignant disease involving the mesentery and absolutely inoperable. Preparation was made to operate for obstruction which was regarded as inevitable. Patient was nevertheless exposed to X-rays; obstruction relieved and continued exposure seemed to quite relieve condition. He thought that our knowledge at the present time warranted the following statement of the best treatment for cancer: Radical surgery as soon as possible, followed by prolonged exposure to the X-rays.

"X-ray in the Treatment of Skin and Glandular Involvements" was the title of the closing paper of the symposium, and was read by Dr. Luther H. Hamilton. He used the X-rays in the treatment of six patients troubled with acne. The first one was an exceedingly trying case, but after 15 exposures, covering a period of seven weeks, the trouble had entirely gone and had not returned at the end of three months. The other patients also were benefited. In three cases of chronic eczema, one patient was cured, one relapsed and one was improving under treatment. One case of Paget's disease of the nipple was entirely cured after 16 exposures and there was no return at the end of four months. In cervical adenitis the results were very promising, but sufficient time had not elapsed to tell whether a cure has been secured.

Dr. K. A. J. Mackenzie opened the discussion on the papers relating to the X-ray by saying that it was now absurd for anyone to deny the very great value of this aid in surgical diagnosis. Its relation to surgery from a medico-legal point of view must not be overlooked, however, and it is of vastly greater importance than is generally thought. Full records of the relations of tube to part examined and to plate, must always be kept, for without these the actual findings cannot be properly interpreted and the result may be very misleading; to the lay mind a skiagraph may look very shocking, yet the condition may be one known to the surgeon to be very satisfactory. As yet we knew too little as to the definite time of exposure and he had hoped for enlightenment from the papers read. He spoke of the danger of increasing the rapid development of some cancers through metastasis, and suggested the advisability of making use of this agent in the treatment of tubercular peritonitis. He recounted the case of a woman who was operated upon for the relief of very marked ascites. There were numerous large nodes all over the omentum and any sort of operative interference was quite out of the question. She was submitted to repeated X-ray exposures, with the result that the reaccumulated fluid was soon ab-

sorbed and now, apparently, the nodes have disappeared. The patient seems to have entirely recovered from the previous condition.

Dr. Andrew C. Smith said that he had been somewhat sceptical as to the therapeutic effect of the X-rays, but Dr. Hamilton had converted him; he believed they were a specific for tubercular skin affections, epithelioma, etc. The treatment should be used by competent men only, and all beginning cancers should be operated upon first and exposed to the rays afterward.

Second Day's Sessions.

The session of Wednesday opened with a symposium on "Nervous and Mental Diseases," the first paper being on "The Paranoid," by Dr. Walter T. Williamson. In an exceedingly able manner the course of the development of paranoia was traced, from the commencement of delusions to the final transformation of personality. In the writer's opinion the paranoid is born; he is the victim of heredity. The diagnosis may not be made for a long time, nor until the disease has progressed to a point where the victim is dangerous; the prognosis is always bad, for paranoia is incurable.

"The Neurasthenic" was treated of by Dr. J. Allen Gilbert, who said that while the personal equation altered the symptoms more or less, there were certain well-recognized, generally constant expressions of the disease that could be recognized as diagnostic. The causes were heredity, sex excesses, mental overwork, worry or anything which produced more strain on the nervous system than it could take care of. He likened the nervous system to a vessel into which water could flow and from which it might be drawn. If the drafts upon the vessel were in excess of the ability to fill it, it would go dry. So anything that drained the nervous system beyond its ability to recoup, would produce neurasthenia. Many drains were totally unnecessary as, for instance, late hours, social duties, dances, card parties for young girls, etc. The disease always occurs at that time when the patient is working hardest or is calling upon his nervous system for larger drafts than it can supply. Reflexes are not abolished, they can always be found; but on repetition they respond less and less well. All such reflexes and symptoms generally are those indicating a condition of nerves that cannot do what they are called upon to perform. The headache, backache, nervous heart and nervous dyspepsia are typical; in men the low hanging sensitive testicle is generally found. It is to be differentiated from hysteria and paresis.

"The Pervert" was the subject treated of by Dr. James P. Tamlesie, and he spoke of the kinds of pervers that existed and were not generally so commonly recognized as the sex pervert. He mentioned three classes to be added to the list of pervers. The gastronomical, the religious and the social pervers were quite as well defined as is the victim of sex perversion.

"The Syphilitic" was the title of the next paper, by Dr. William House. He thought syphilis was not the cause of so many diseases as held by many men. He recognized true tabes and the tabes due to this disease. Much of the belief he thought came from the statistics made up from public institution reports. In these institutions records were apt to be imperfectly kept, and many things were assumed or guessed at that were not the facts. He made a very careful review of the clinical history of the disease, and stated that he thought from five to ten per cent of the sufferers from syphilis never entirely regain full and competent mental poise; the shock to most when they learn that they have the disease is very great.

There is no chronic non-febrile disease which syphilis cannot and does not, more or less often, simulate.

Recess was taken until the afternoon session, and upon convening Dr. J. T. Lock exhibited a child of two and one-half years of age suffering from hydrocephalous. The only signs of consciousness which it exhibited were to cry when hungry and apparently recognize its mother.

"The Tubercular Relation to Nervous and Mental Diseases" was the theme of Dr. Woods Hutchinson, and he said that but little was known as to this relationship. He thought medicine was now in a reactionary stage and that a general rather than a special cause should always be looked for. When an organ, as the kidney, is at fault, it is simply an indication that something in the general system is at fault and has caused the trouble with the special organ. There are generally definite poisons at work to produce even localized diseases. The diathesis or the general toxic element should always be looked for most carefully. He spoke of tubercular meningitis and thought it more common than generally supposed. He knew of one house with tubercular infection in which four children, one after another, had died at from one to two years of age with tubercular meningitis. He spoke also of tubercular neuritis. Wherever the weak spot is, there the general disease will be manifest. The relation of tuberculosis to the insane was a very important one and could not be entirely explained by the confinement, etc.

"What Can We Do For Them?" was the title of Dr. John S. Klobner's closing paper of the symposium. He thought the paranoiac hopeless. The only thing to be done was to watch out for the children of those afflicted and to try and bring them up under the most favorable conditions. The animal development and not the mental should be considered the desideratum. Labor, physical exercise in the open air, and very little call upon the brain was to be recommended for these children. He then said:

"There is coming a time, gentlemen, when the treatment of this class of trouble is going to be the absolute prevention, so far as prevention is practicable by the intervention of the law, to prohibit the marriage of persons who are known to have the hereditary diathesis of these mental degenerates. Instead of the physician being called upon to direct the lives of the unfortunate offspring of such parents, or the neurologist to care for the hopeless victim at the public expense, the ax will be laid to the root of the evil and a law will state that the greatest public good demands that these persons shall not legally inflict future generations with a mind-twisted progeny, just as it now says that the patient suffering from an infectious or contagious disease shall not be a menace to other people, but shall be controlled by proper or, when necessary, enforced quarantine restrictions. I know that this is taking a very much advanced stand, and one that will require a great and well-directed effort to overcome the present conviction that it will be an abridgement of personal liberty that cannot be enforced. But it can be in the same manner that all of the laws for the protection of the public health have been made and enforced, by the presentment of such evidence by persons of recognized authority as to bring to bear upon the great majority of the public, who make the laws, such indisputable proofs of the hereditary tendencies of these psychoses that will place these laws upon the statute books and effect their enforcement.

"Why should the paranoiac with his known heredity be permitted to inflict this world with a mentally unsound progeny, who will, in the course of events, again do the same to the end of the cycle, any more than the person with smallpox, or the child with

scarlet fever is allowed the dissemination of their diseases, or the tuberculous patient the ejection of sputa when and where he pleases.

"The gospel of increase and multiply has been preached from time almost immemorial by preacher, litterateur and statesman alike, and their theme has been that of quantity, rather than quality. Even our worthy President of the United States in his addresses, if he has been properly quoted, has descanted forcibly upon the sin of what he chooses to term race suicide. The codfish with its million young seems their ideal. The general acceptance of the opinion that large families are a test of advance of evolution seems strange, when the extent and force of the action of the principle of individuation is taken into account. And when it is remembered how prolific are the lower vertebrates when compared with the higher, biology challenges the view that multiple and frequently repeated births are expressions of race advancement. It has been noted that even the ancestors of those predisposed to phthisis have numerous families.

"It is a well known fact that multiple and frequently repeated pregnancies are common among the families of the hereditary lunatics. This is forcibly corroborated by Drs. Kiernan and Harriet Alexander in connection with the hereditary lunatics from Cook County. They found that 90 families of the hereditary insane averaged 11 children each. Of these, four had 13, three had 16, three had 17, four had 18, three 19, five 20, and one had 21 children. Twins triplets and quadruplets were six times as frequent as among normal families. Many others have reported corresponding conditions. Valenta reports the case of an epileptic mother who had 36 children, including six times twins, twice triplets and four times quadruplets. Her daughter, also an epileptic, bore 32 children before she was 40, including quadruplets twice, triplets four times and twins once. Similar, though less striking statistics occur with other classes of degenerates with proportionate frequency, when the sterilizing effect of the diseases to which they are specially liable is taken into account.

"Do not these facts in themselves constitute a sermon, and are they not of sufficient moment to bring us at least to the consideration of making such conditions legally impossible? We have succeeded by statutory measures in stamping out almost entirely many of the contagious diseases that were a menace to the population of the world, and I think it about time that we at least begin the movement toward some practical steps looking to the extinction of these mental diatheses."

Neurasthenia, he thought, could only be properly treated by considering each patient separately; find the cause and then try to remove it, and if this is successful the patient speedily recovers. Ferruginous tonics, arsenic and rest seem to be about the only things otherwise indicated. The degree of rest depends upon the individual patient under treatment. Massage and electricity are also useful, and baths, properly conducted and managed, are desirable. Full selected diet should be given. All intestinal torpidity should be relieved and auto-intoxication guarded against. For this latter he considered beta naphthol in ten grain doses every one to three hours, was about the best remedy. Plenty of water, especially hot, on an empty stomach, was excellent.

Dr. Simeon E. Josephi discussed the matters presented in the symposium. He thought the term "paranoiac" somewhat vague. The term partial insanity he thought improper, for he argued that a person could not be insane on one point and sane on all other topics. In all murder cases where there was any question as to the liability of the criminal, or to the certainty of his being a paranoiac, he

thought the benefit of the doubt should be given to the community, for paranoiacs are too dangerous to be at large. He disagreed with one of the writers and thought that the importance of syphilis as an etiologic factor in nervous and other diseases had not been overestimated. Not a few people suffer from syphilis and do not know it. He cited two instances of patients with whom he had come in contact who had the disease, but did not know it.

A "Kidney Symposium" was the closing feature of the scientific program, and the first paper was read by Dr. Albert E. Mackay on the subject of "Modern Methods of Diagnosing Kidney Disease." He considered the segregation of the urine the most important diagnostic aid, and discussed the relative values of catheterization of the ureters, the cystoscope, the Harris instrument, and the most recent one in which a septum is placed across the bladder in the median line by means of a very skillfully devised instrument, which he demonstrated.

"Dietetic Treatment of Various Forms of Kidney Disease" was presented by Dr. Charles J. Smith. He first analyzed kidney affections into acute and chronic, and the chronic into interstitial and parenchymatous. The treatment varies more or less with the particular form under observation, but the effort is to get the skin and bowels to take up the work that the kidneys should do, but cannot.

"Causation and Pathology of Chronic Bright's" by Dr. Woods Hutchinson, was listened to with interest. He considered albumen in the urine as of but little importance in itself. For all the albumen lost in one day one drink of milk would supply the deficiency. Too much attention has been devoted to the question of dieting so as to reduce the amount of albumen in the urine, and the kidneys have thus been starved. The total solids in the urine, he considered the important question. It is not a disease of the kidney, primarily, but a condition due to the falling upon the kidney of work that should be taken care of elsewhere. He thought that the kidney has a secretory as well as an excretory function, and that some condition of the general system rendered the secretion of the kidney impossible or defective; the Edebohls operation seemed to let this something out into the blood, with a consequent improvement in the condition of the affected organs. There certainly seems to be something that changes albumen into urea under normal conditions, and in conditions of irritation of the kidney this something is reduced or lacking.

"Anuria" was presented by Dr. Park Weed Willis, who said that the term as generally used was a misnomer; anuria is very rare. Partial anuria is the true condition usually spoken of as anuria. He made a careful presentation of the subject from recent literature, drawing largely from a paper by Arthur Dean Bevan (*Annals of Surgery*, May, 1903).

The last paper of the symposium, and of the meeting, was that of Dr. K. A. J. Mackenzie, on the subject of "Indications for Nephrectomy." He said it was not wise to remove a kidney that could secrete even a little. It is most essential to locate the offending kidney and to be sure there is another; he had found the Harris segregator very valuable. He then listed the conditions in which removal of a kidney was justifiable or desirable, recommending at the same time the greatest caution in this connection. In the case of movable kidney he thought many operations for removal should not be performed. Unless the hydronephrosis is extreme, or the ureter becomes closed and cannot be fixed, the kidney should not be removed. A kidney that is the seat of a pus process should not be removed until the very limit of medical treatment has been reached.

Dr. Andrew C. Smith opened the general discussion on the papers of the symposium, and said that

he thought it wrong to employ any drug directed to the kidneys. The only drug he ever used was occasionally employed, not for its effect on the kidneys, but for its action upon the heart and general circulation—nitroglycerin. Increased tension, sclerosis and general cardiac disturbance are early indications of interstitial nephritis and nitroglycerin is almost always of value. Where there is cardiac dilation digitalis and strychnia are useful. He thought the old plan of diet had recently been shown to be bad; possibly it was not well to starve the kidneys in order to eliminate albumen from the urine. Intestinal fermentation and auto-intoxication should be very carefully guarded against in any treatment. He thought it impossible to drain a hydronephrotic kidney indefinitely without getting up a pyogenic infection. In the case of a pyonephrotic kidney, unless the diagnosis is made early and before much damage is done, he thought the organ should be removed.

Dr. Henry W. Coe, president of the Washington State Medical Society, said that any treatment was of little avail. These patients go from bad to worse and their fate is known. Why dally with the condition? From his personal experience he knew what it felt like to live along with death staring one in the face, and feeling a little more drop in general condition from day to day. When it is recognized, and you know that the patient cannot recover, why not do the proper thing at once? Why not cut down and split the capsule? He had been operated upon himself and he knew what the immediate benefit was, and what the improvement to be expected was. Of course the operation is a recent one and we cannot be absolutely sure; there have been raised questions of accuracy in diagnosis; but the result is, he thinks, certainly one of improvement, if not indeed cure. The operation is not easy, but it should be done. The whole of the capsule should be removed. If the kidney is nicked no harm is done. The object is to strip the kidney and get firm adhesion between that organ and the quadratus; the patient should be kept quiet for several weeks.

The following officers were elected for next year: President, Dr. Walter T. Williamson, of Salem.

First vice-president, Dr. Tape, Hot Lake.

Second vice-president, Dr. Mae Cardwell, Portland.

Secretary, Dr. L. H. Hamilton, Portland.

Treasurer, Dr. Jessie McGavin, Portland.

Councillors, Dr. White, of Gervais; Dr. Josephi, of Portland; Dr. C. J. Smith, Pendleton, delegate to A. M. A.; Dr. K. A. J. Mackenzie, Portland, alternate.

Among the questions taken up was that introduced by Dr. Caspar W. Sharples, of Seattle, who desired to know what the sense of the society was regarding the inviting of the American Medical Association to Portland in 1905. He stated that if Portland thought it could not very well accommodate the 4000 or 5000 delegates that would attend the meeting, Seattle would like to propose that the society meet there, and would take measures to bring it to the Coast. The question was referred to a committee to report later.

Dr. Williamson then introduced the following resolution, which was unanimously carried:

Whereas, The present Oregon system of trial of a civil or criminal cause, with insanity as the defense, is imperfect, inasmuch as the medical experts are subjected to the bias and prejudice of being called by either the prosecution or defense, and

Whereas, The present system receives such expert testimony only during the controversy and struggle incident to the progress of the trial, and

Whereas, The medical expert should have no interest in the case on either side, financial or otherwise, and

Whereas, Better and More advanced systems of procedure are followed in some other countries, to the benefit of right and justice; therefore, be it

Resolved, That it is the sense of the Oregon State Medical Society that the present system should be changed by remedial enactment of the Legislature, empowering

the judge, at his discretion, or making it his duty, to call in expert testimony, and

Resolved, That the members of this society hereby pledge themselves to give earnest support to such legislation, especially asking such physicians as are members of the Legislature to work for such a measure, and

Resolved, That the secretary of the society submit our invitation to the State Bar Association to co-operate with us in our efforts to procure the enactment of some such legislation.

A second resolution, looking to the better care of the feeble minded by the establishment of a separate institution for their benefit, was adopted as follows:

Whereas, Statistics establish that about one person in every 600 is feeble minded, carrying with it the features of dependence and burden, and

Whereas, The present system of placing such persons among the insane for care and treatment is obstructive, unkind and unjust, and

Whereas, The estimated population of Oregon is 450,000, which would contribute about 700 to be classed as feeble minded, demanding humane care and education, therefore be it

Resolved, That the Oregon State Medical Association favor the establishment of a separate institution for the caring of the feeble minded in this state, as profitable, legitimate and humane, and recommend such action at the next session of the Legislature. Respectfully submitted,

W. T. WILLIAMSON,
WOODS HUTCHINSON,
HARRY LANE,
J. ALLEN GILBERT,
C. J. SMITH.

SAN JOAQUIN VALLEY MEDICAL SOCIETY.

SIXTEENTH SESSION.

Reported by PHILIP MILLS JONES, M. D.

The 16th semi-annual session of the Valley Society was called to order by the President, Dr. J. D. Davidson, at the Hughes Hotel, on the morning of the 13th of October. The attendance was very satisfactory, though the members present thought the society should have a larger number of the physicians in the eight counties which it embraces, upon roster. This matter was touched upon by the president in his address, and he also emphasized the absence of squabbles, fights, etc., in the society; harmony had characterized its meetings from the very first. The roll call was dispensed with, and after reading the minutes of the last session, the following committees were appointed: Censors, Drs. R. E. L. Morton, W. E. Lilley and W. W. Cross; Finance, Drs. H. W. Taggart, P. N. Russel and J. L. McClelland; Ethics, Drs. A. B. Cowan and E. C. Dunn.

Applications for membership were received from Drs. E. S. O'Brien, Merced; A. H. Wallace, P. Manson, Fresno; W. Whittington, Dinuba; T. Feemster, Porterville; J. G. Thompson, Oakdale; A. M. Smith, Merced; T. M. Semple, Fresno. These applications were referred to the censors, who later reported favorably upon all except Dr. Whittington's name; the others were elected.

A new constitution and by-laws was read and adopted. It is along the lines of the American Medical Association recommendations, admitting to membership all reputable licensed physicians who do not practice sectarian medicine, and who belong to the county society of the county in which they practice, if there be such society. Under "new business," Dr. J. L. Carson, of Bakersfield, brought up the question of fees for life insurance examinations. He called attention to the fact that the society passed a resolution some three years ago, requiring its members to make no examinations for a less fee than \$5.00. He said that many of the "old line" companies, like the New York Life and the Equitable, would not pay more than \$3; doctors examining for them should charge the full fee and should insist on get-

ting it, or refuse to do the work. Dr. Trowbridge said he had had much experience in this matter, and that while it was true that the resolution did exist, it was not lived up to by some members of the society, and he thought it better to remove the requirement rather than to discipline members for violating it. He moved to rescind the resolution; motion seconded. Dr. Carson said the doctors could do much if they made a strong fight; he thought that personally he had made it cost the New York Life more than the amount it would have spent had it paid him the fee he demanded, \$5, and which it would not pay. Dr. Hildreth, Delano, thought that the resolution should stand; doctors were entitled to at least the compensation of \$5 for making a thorough examination. Dr. E. C. Dunn said that he insisted on the \$5 fee, but he thought it better to rescind the rule than to deal with the members who did not desire to live up to it. The motion to rescind was lost by a vote of 9 to 6. On motion, the president was instructed to appoint a committee of three members to draw up and present to the State Society a resolution setting forth the condition of affairs and asking the aid and co-operation of the State Society in securing proper action by these insurance companies. Motion was carried unanimously and the chair appointed Drs. G. A. Hare, A. B. Cowan and J. R. Walker. Dr. Hildreth asked the committee to see that the matter was duly presented and considered by the State Society, for that organization could do very much toward securing proper action by the companies referred to. The society then adjourned to meet at 1:30 P. M.

The first paper of the session was read by Dr. R. E. Bering, on "Hyoscin Hydrobromate as a Specific for the Cure of Morphin and Whiskey Habits." He said that he had been using the drug for some two years and the results were astonishing; he thought the time would come when there would be State institutions for the treatment of the victims of these habits by this method. No matter how much a victim to the habit the individual, he could be absolutely cured by this treatment, properly administered, in a short time. He accentuated the necessity for its proper administration, however, for unless it was done properly it would result in no permanent result. The patient must first be thoroughly cleaned out, removing all possibility of autoinfection; the room in which he is to be confined during treatment should have no superfluous furniture, and should be dark; it is well to have the windows barred, and a trained nurse, competent to handle the patient must be in constant attendance. The physician administering the treatment must be near at hand and study the patient from hour to hour, not trusting to any nurse to administer the drug. He begins with 1-100th of a grain every hour hypodermatically and continues until the full physiologic effect of the drug has been reached. This is indicated by the flushed face, wild delirium, excessive dilation of the pupils, etc. When this stage has been reached the drug should be given in just sufficient amount to keep up the physiologic effect for 48 hours in the case of alcoholics and 72 hours with morphin victims. The amount will vary with the individual, but will not be more than 1-100th grain and probably will be less; some patients were kept under on 1-300th grain every two or three hours. The first treatment will probably scare the physician, for the delirium induced is very great. When the patient comes out from the influence of the drug he is offered whiskey, and if this is accepted by the patient the hyoscin is again administered for another 24 hours. Sweating is profuse and patients should have plenty of water. They come out from the drug in about six hours and then the general condition needs

attention. The stomach has been affected by the past habit, and careful light feeding should be the rule for some time. He gave a summary of six patients who had been treated after this manner, in all of which cases the recovery was prompt and the cure decided.

In discussing the paper, Dr. W. T. Barr said that he had not tried the treatment on morphin users, but he had with alcoholics, and so far as he knew they were all cured. In his opinion, however, the treatment was too severe; the patients came out from the treatment with shattered nervous system and did not seem to regain perfect health; this he thought might be due either to the habit or to the treatment. The after-treatment was essential and the patients must be built up with tonics, etc. The treatment is very vexatious for the general practitioner, for it practically takes up all his time; he must be in constant attendance on the patient. The delirium is far worse than that of delirium tremens, and generally scares the physician pretty thoroughly. It certainly will straighten out any case of alcoholism in 48 hours, however. Dr. W. N. Sherman asked for further information as to the subsequent history of the patients treated by Dr. Bering. Dr. Bering replied that they were all chronic drunks of the worst sort when treated, but that none of them had relapsed; some were treated so long as two years ago. He said he could guarantee to cure, no matter how bad the habit might be. Some of his patients went into saloons on business, but had no desire to touch alcohol after the treatment. Dr. Hildreth asked whether there was known to be any constitutional effect tending to shorten life. He thought any treatment so very harsh would be apt to have a very great constitutional effect. Cutting off the alcohol might have an injurious effect. He cited two men, one 59 and the other 64 years of age who voluntarily stopped drinking; they both died within 18 months. Dr. Cross asked what were the counterindications to the treatment. What patients would be regarded as unfavorable ones for this treatment? It is new to the public and they would not be apt to forgive any untoward result from a thing so new. Would a bad condition of the kidneys, for instance, counterindicate the treatment? Dr. Bering replied that he had recently read of a patient with Bright's having successfully taken the treatment and he thought if properly given there was no danger and no contraindication. But the treatment must be adapted to the particular patient. The discussion became more or less general, Drs. Cowan, Cross, Bering and Barr participating, and referring to one or two cases of complications where the result had not been satisfactory or the patient had died within a few months afterward. Dr. Hildreth suggested that when these patients come to the doctor they are in bad condition and it is not easy to tell what their normal condition would be. Dr. Pedlar said that he had observed two patients who had been given the treatment and that they were both nervous wrecks afterward; both relapsed and said they did not experience any lessening in their desire for alcohol. This might have been due to improper administration of the treatment, however. One patient referred to in the discussion as having died after the treatment died of pulmonary edema; he had had asthma for years. Dr. Barr mentioned two or three successful cases and said that the success of the treatment depended upon the manner of its administration; the doctor must be constantly at hand. In closing Dr. Bering said that it was most important for the physician to thoroughly understand the physiologic action of the drug and to use it so as to keep the patient under its full influence for the time required. If it is administered properly and intelli-

gently he thought it would always be found absolutely successful.

Dr. J. L. McClelland, of Los Banos, read a "Report of a Diphtheria Epidemic" which occurred in a district where no diphtheria had appeared for many years, and where the doctors had consequently had no experience with antitoxin. The first patient seen was a hunter, and the diagnosis was not made at once. Later a membrane appeared and the diagnosis was made. It was a severe attack and a consultant was called in. The attendant urged the use of antitoxin, but the consultant objected; said he had heard very bad reports of the use of the serum, and thought it too dangerous. Sores on the hands and body were affected and membrane appeared upon them; the patient died. His dog seemed to have developed the disease and was killed. He considered this man's death was due to the influence of one of the rank medical journals published in the Middle West, in which various articles attacking the use of antitoxin had appeared, and had been read by the consultant. The second case occurred two or three days later, in a boy of 4; it was a severe attack of the laryngeal variety. The attendant physician wanted to use antitoxin, but the mother objected; she had heard the other doctor speak unfavorably of it. Iron and carbolic acid were used, but the patient died at the end of 34 hours. Another child in the same family developed the disease and antitoxin was used; it recovered so quickly that the attendant rather doubted the diagnosis. The first patient seen by Dr. McClelland had a temperature of 104 degrees, and was given 1000 units; the following day another similar dose was given; the patient later recovered. The next case was severe; no membrane appeared for several days and the diagnosis was doubted; the patient grew worse and 1000 units were injected into the gluteal muscles. The child was so sick they prepared for intubation, the following day was better; 1000 units more were given and the patient slowly recovered. He mentioned other similar cases, but all recovered under antitoxin. In all there were 80 cases, of which number 5 patients died. Two of these deaths were patients who had not received any antitoxin, and one was a little child who died at the time the antitoxin was injected into the arm; the disease was far advanced and death may have been due to too sudden entrance of the serum into the circulation. He referred to the difficulty of the country practitioner in making diagnosis; he could not wait for a culture to be made, even if the proper apparatus were at hand. Something must be done at once, and as antitoxin could do no harm it should be used in every suspicious case. He wondered that no harm had been done in using the antitoxin, for no aseptic methods were employed by some doctors. One man would pour out the serum into a spoon, fill his ordinary hypodermic with the serum, inject it, and then refill it and inject the second half. Once the syringe did not work properly so he poured it back into the spoon, fixed the syringe and tried again. He thought 1000 units should be used first, and then if more was needed it could be given.

In discussing the paper Dr. Hayden said that Fresno had gone through the same experience since he came there; it was certainly true that at first there was opposition, but after it had been tried there was none. He thought 1000 units too small a dose. He had given 3000 units to a 3-year-old child; it seemed to be perfectly harmless, and enough to do the work should be given. The main thing was to use it early, and give enough. He considered it of the utmost importance to keep the patient in bed for two or three weeks in severe cases, for otherwise the patient's heart might give out suddenly. We

should anticipate these heart failure cases by using strychnin and by keeping the patients in bed. Dr. Hildreth thought that if larger doses of antitoxin had been used the danger of heart failure would have been greatly reduced. Dr. Trowbridge said he thought the diagnosis of tonsillitis was often made when the case was one of diphtheria. Mild cases he considered rather commoner than generally believed, and the existence of paralysis following what had been considered tonsillitis he regarded as indicating a mistaken diagnosis. He referred to one such case which was followed by what strongly simulated tabes; but on treatment the paralysis disappeared. He considered the dose used by the writer too small; large doses should be used first. Dr. Moor considered early administration of sufficient quantity of serum the all-important thing; enough should be given at once to have a decided effect. No other treatment is necessary. Dr. H. W. Taggart mentioned the occurrence of a case in a family of eight children. The boy had been treated by a Chinese doctor for sore throat, and when seen had a temperature of 104 degrees, and there was membrane in the throat. 2000 units were given at once; six hours later a second 2000 units were given, and in 48 hours the child was well. The rest of the family received prophylactic doses of from 500 to 2000 units each and no other case of diphtheria developed. Dr. Walker spoke of an epidemic of 38 cases of the disease; it was checked by free use of prophylactic injections. One patient of his, a girl of 16, had a severe attack, but recovered; she was ordered to keep to the bed, but insisted on getting up to go to stool. She walked half way across the room and dropped dead from heart failure. Dr. Dunn asked what the diagnostic symptoms were that indicated the presence of diphtheria and the necessity for serum? In the practice of the country physician it is impossible, generally, to get cultures made in time to do any good. Should serum be used in every suspicious case, or were any general diagnostic symptoms recognized. Dr. Bering thought it best to use the serum in any suspicious case; it could do no harm and might save the patient's life. He would use it as one uses iodid of potassium in cases of suspected syphilis where the diagnosis cannot be absolutely made. Dr. Manson thought the disease was first a local affection with a spot located in the throat, and that often local treatment would be advantageous. He referred to the old days when persulphite of iron was used to dissolve the membrane, under the belief that it would prevent the absorption of the disease from the membrane. Dr. McClelland spoke of the general symptoms and thought it impossible to make an absolute diagnosis in some cases very early. The antitoxin should be used if the case is suspicious, but a small amount should be first given. There was no necessity of using 2000 units if 500 would suffice. The expense is quite an item and must be considered. He thought it better to consider tonsillitis-diphtheria and use serum, than to call diphtheria tonsillitis and possibly have the patient die. In some cases where a prophylactic dose had been given, he observed that the patient later had a very mild attack of the disease. Dr. Cross considered Dr. Dunn's question as important as that of the size dose to be given. The first point was never to make the mistake of not considering croup diphtheria; the temperature might be low, but the diagnosis should always be suspected. We should take no chances and should give serum at once and in large doses. Where the membrane formed in the trachea or larynx the diagnosis might be hard to make for a couple of days; but the general symptoms should lead one to suspect the trouble pretty early. Membrane on the tonsils, gray or yellowish gray, was diagnostic, and membrane

on the uvula he considered absolutely diagnostic. The first cases occurring in an epidemic are generally not severe and often are not recognized; this may account for the spread of the disease. A large amount of a weak culture or a small amount of a powerful culture would in either case produce profound results. He considered the cause of sudden death from heart failure due to an acute fatty degeneration of the heart muscle. He thought local treatment bad, for it only agitated the patients and did no good. Dr. Hare thought that need not be made; tonsillitis should not be confounded with diphtheria and if the diagnosis could not be made, antitoxin should be used anyhow. In many cases it is impossible to make a certain and early diagnosis without cultures, but in such cases the serum should be given. He reported the observation of 3 cases of the disease which had been contracted from a cat. All had from 1000 to 3000 units and recovered. The benefit of the doubt should always go to the patient's favor and the antitoxin should be used. Dr. Davidson agreed with Drs. Cross and Hare in believing that the serum should be used early and in sufficient quantities. Small doses he considered nearly useless and he referred to the paper of Dr. Burrows printed in the *STATE JOURNAL*, in which the use of from 7000 to 48000 units was reported. Dr. W. N. Sherman mentioned the change in sentiment on this question, as indicated by the present discussion compared with one on a similar paper to which he referred, some years ago. Dr. McClelland, in closing, said that the thing was to give enough antitoxin; if a small dose was enough, all right; if not, give a larger dose.

The paper by Dr. W. W. Cross on "The Practical Value of the State Medical Law" was the next one. This, together with the discussion on it, will be found in this issue of the *JOURNAL*, page 363.

Dr. W. E. Lilley read the next paper, entitled "Uric Acid in Its Relations to Bodily Ailments." He thought that much light could be thrown upon many questions by a careful study of the uric acid question in the domestic economy. A certain amount of the acid is eliminated and a large amount may be stored up, being liberated subsequently and when not expected. Thus a patient might be on a uric acid-free diet, and yet have a sudden increase in the uric acid due to liberation of some that had been stored away in the liver. If one could eliminate the uric acid and keep out the uric acid synthins these conditions might be greatly relieved. He cited a case of uric acid headache which had persisted for years, yet which was entirely cured by a properly regulated diet and careful attention to bowels and feeding. After a time all the stored uric acid was eliminated and the headaches entirely ceased. Dr. Dunn, in discussing the paper, said that Dr. Lilley seemed to have covered the ground pretty thoroughly. He thought that a better knowledge of uric acid formation would be of very great aid in the treatment of a large number of ailments. Dr. Lilley said that the main point he wished to bring out was a consideration of this question of storing up uric acid, and its liberation when least expected. It seems to be taken up out of the blood and stored in the liver or spleen.

At the evening session Dr. J. R. Walker read his paper on "The Care of the Eyes During School Life." He made a careful review of the work that had been done on the examination of the eyes of school children, and emphasized the necessity for examinations in every school. The increase of myopia in school children, in this country, had now been clearly demonstrated, and it should receive the careful consideration of every physician. Every child should have its eyes examined on entering school, and should be carefully looked after in this particular; dull or backward pupils should be sent to an

oculist for a thorough examination. The prejudice against glasses seems to be fading and it could be largely combatted by the general practitioner. Dr. Trowbridge, in discussion, said that the subject might be a dry one to the general practitioner, but it was not to the oculist, who observed the rapid increase in eye troubles in school children. The Germans are a myopic race, owing to the many generations of hard study; we are rapidly increasing in the matter of myopia in school children, and it should be guarded against. He warned against sending children to an optician and mentioned the fact that in some states the opticians were compelled to send all patients for whom they could not get 20-20ths, to an oculist for proper examination. The position of the pupil must also be considered and congestion avoided. Many cases of hypermetropia could not be detected unless the children were examined by a specialist, so he thought the work should be done by one properly trained and not left to the teacher. Dr. Hare thought we were rapidly reaching the point where there would have to be a physician inspector for each school, and thus secure properly and carefully looking after the health as well as the eyes of pupils. Children should be well looked after in order to make good healthy men and good citizens. A gross error of refraction might exist for years and handicap a child, when by finding and correcting it the child would more rapidly and completely develop. In closing Dr. Walker said that hypermetropia would be found in most cases if the apparently dull or backward children were watched and carefully examined. The teacher could do much, but a doctor was certainly a better examiner. Dr. Dunn asked if Dr. Walker thought the present curriculum was too hard for the normal eye. Dr. Walker thought that this was often the case.

Dr. Trowbridge exhibited two patients who had subacute glaucoma. In both cases a good free iridectomy.

An invitation was extended for the Society to meet at Tulare at its next meeting. The invitation was accepted.

On motion, it was decided that hereafter one-half of all expenses of any entertainments furnished the Society should be paid from the society treasury.

The following officers were then elected: President, Dr. Moor, of Hanford; 1st Vice-President, Dr. Bering, of Tulare; 2nd Vice-President, Dr. Taggart, of Stockton; 3rd Vice-President, Dr. Phillips, of Kingsburg; Treasurer, Dr. J. M. Hayden. On motion the Society then adjourned to meet the second Tuesday in March, 1904, at Tulare.

Following the evening session the members and guests gathered in the dining-room of the Hughes Hotel, where an excellent banquet was served, tendered to the Society by the Fresno County Medical Society. Dr. E. C. Dunn acted as toast master and the evening passed very pleasantly.

OTHER SOCIETY MEETINGS.

Fresno County.

The regular monthly meeting of the Fresno County Medical Society was held on October 6, at the office of Dr. P. N. Russell, the president, Dr. E. J. Couey, in the chair.

On roll call the following members responded to their names: Drs. Aiken, Couey, Hayden, Wallace, Melchonian, Nicholson, Steinwand, J. L. Maupin, Dunn, A. D. Wilson, Morrison, W. F. Maupin, Manson, Gebhart, Pedlar, J. R. Walker, Russell, Hare and Rowell.

After the reading of the minutes the following resolution was introduced and adopted: "Knowing that the indiscriminate and illegal sale of morphine,

cocaine and other dangerous substances is notoriously conducted by some of our local druggists, be it, by the Fresno County Medical Society,

Resolved, That we unqualifiedly condemn such indiscriminate and illegal sale of such poisons; and be it further

Resolved, That this Society hereby calls the attention of the Board of Health of Fresno city to this matter, respectfully requesting said board to use its official efforts to curtail or abolish such illegal practices;

Resolved, That a copy of these resolutions be officially transmitted to said Board of Health by the secretary of this society."

It appears that there are one or more drug stores in Fresno that are notorious for their non-observance of the law relating to the sale of these poisons, and it is the endeavor of the society to put a stop to this promiscuous sale of morphine and other drugs to the fiends.

In the matter of James Gerow, an unlicensed practitioner of Laton, the committee of ethics, heretofore instructed to investigate the matter, reported that it was the intention of Dr. Gerow to go before the Board of Examiners in December, and until that time the committee recommended that no action be taken. A motion to this effect carried.

On motion of Dr. G. A. Hare, duly seconded, it was unanimously carried that the STATE JOURNAL be made the official organ of this society.

The paper of the evening was entitled "Gastric Ulcer," and was prepared and presented by Dr. E. C. Dunn. It proved to be a subject of much interest and was generously discussed. The paper was sent to the publication committee of the STATE JOURNAL.

After the payment of dues and adjournment, an unusually dainty repast, with refreshments was partaken of, Host Russell proving himself a past master of the art of entertaining his fellow practitioners.

ANGUS B. COWAN, Sec'y.

Humboldt County.

The regular meeting of the Humboldt County Medical Society was held in Eureka Tuesday, October 13, with a good attendance. Regarding the matter of Dr. Nelson of Hydesville, practicing without a license, the District Attorney reported that he had communicated with the State Board of Examiners and with Dr. Nelson. The State Board reported that Dr. Nelson would have to make the necessary application for examination at the next meeting of the Board and file his diploma, and must appear for examination at the next meeting. This Dr. Nelson agreed to do.

The fee bill was taken up and part of it was gone over and discussed; the balance was left for another meeting.

The paper of the evening was read by Dr. A. Miller of Ferndale, entitled "A Report of Six Cases of Achlorhydria," which will be published in an early issue of the STATE JOURNAL.

G. N. DRYSDALE, Secretary.

Los Angeles County.

The Los Angeles County Medical Association met at Blanchard Hall on the evening of October 2, there being about 30 members present.

The paper of the evening was a report by Dr. E. R. Smith of Los Angeles, on the following subjects: 1. "A Case of Aneurism of the Aorta. Treated by Wire." 2. "A Case of Infected Wound of the Hand by a Bite from a Child Suffering with Diphtheria." 3. "Case in which a Bullet was Located Near the Spine by the X-Ray."

In the first case about 50 feet of soft iron wire was

ing to order and Dr. King was then elected temporarily inserted at two sances, which was followed by great improvement in the patient's condition, but the man finally succumbed to exhaustion and hemorrhage. The sac was enormous, holding about 3 pints. The point of interest in the second case was the fact that culture of the pus from the surface of the hand gave a pure Klebs-Loeffler bacillus and the successful treatment of the case, after surgical methods were tried, by the use of 12,000 units of antitoxin. The bullet case was of interest because the X-ray located it on a plate exactly where it was found on operation.

Five applications for membership were received, and Dr. H. Bert. Ellis, chairman of the committee on constitution and by-laws, read his report, the report being the new constitution and by-laws recommended by the committee as having been approved by the American Medical Association. They were thoroughly discussed and adopted by vote.

Dr. W. W. Hitchcock was elected a delegate to the National Auxiliary Congressional Legislative Committee of the A. M. A.

The meeting held on the evening of October 16, was a most interesting one. There were two new applications for membership received, Dr. A. T. Newcomb, of Pasadena, and Dr. C. B. Nichols, of Los Angeles. There were five new members elected, viz: Dr. H. H. Nast, Los Angeles; D. Elbert Wing, Los Angeles; Dr. Paul Bresee, Los Angeles; Dr. C. W. Foster, Guanajuato, Gt. Mexico; Dr. Cecelia Reiche, Los Angeles. There was a full attendance from all over Los Angeles County, there being about 50 present.

The program was a paper by Dr. J. H. Cobb, U. S. Marine Hospital Service, his subject being "Method of Spread of Infectious Respiratory Diseases." The paper was handled in a very interesting and original manner, and although I am not able to give it in detail, yet I hope to be able to get the paper for the JOURNAL. The paper was fully discussed by Dr. L. M. Powers, health officer for Los Angeles, and others.

Dr. Lewis Thorpe, member of the State Board of Examiners, of the Medical Society of the State of California, then read his paper entitled "The State Examination in Medicine." Dr. E. C. Buell, member of the Examining Board, (Homeopathic), opened the discussion. He said, in part, that he "appreciated the courtesy of the invitation to speak before the Los Angeles County Medical Association. Dr. Thorpe's paper was in reality a plea for financial support; for the defense of and the upholding of the medical profession in its administration of the law, as it related to the examination of candidates for admission to practice medicine in California. There are suits pending, one is brought by individuals who wish to have the Board of Examiners ousted, and the law repealed. These men bringing suit wish to have candidates graduating in other states take the examination, but do not think that graduates of California colleges of medicine should be required to pass such an examination. At present the Board of Examiners has no discretionary power; all must take the same examination. It might be well to have the law so that some might not have to pass the examination before being allowed to practice. For instance, men of exceptional gifts, graduates of colleges whose requirements are very high and who have come to California to live and are practicing, might be allowed to continue to practice with only a provisional license, on the understanding that they were to take the examination as soon as possible. At present any one practicing without a license is guilty of a misdemeanor. The Board at present needs money to prosecute illegal practitioners, and I would urge that a fund be raised by the various medical societies, to be used as a defense fund, to up-

hold the Board of Examiners in their efforts to maintain the integrity of the medical profession."

Dr. Le Moyné Willis read a set of resolutions offered by a committee to the Santa Clara County Medical Society on August 19, 1903, appearing in the CALIFORNIA STATE JOURNAL OF MEDICINE for September, 1903, and said that he felt that this Association should not be behind in expressing its views. He accordingly offered the following set of resolutions:

Whereas, The Los Angeles County Medical Association, in regular session assembled, this 16th day of October, 1903, having heard read the very careful report of the Special Committee of the Santa Clara County Medical Society to that society August 19, 1903, and published in the September number of the CALIFORNIA STATE JOURNAL OF MEDICINE; and having listened to the very able and succinct address on "The State Examination in Medicine," by Dr. L. S. Thorpe, and discussions by our local members of the State Board of Examiners, views with alarm the suit to oust the present State Board of Examiners now pending; therefore be it

Resolved, That the Los Angeles County Medical Association hereby endorses the position and action of the Santa Clara County Medical Society, taken relative to this suit against the State Board of Examiners, and hereby pledges the influence and support of this society, individually and collectively, to the State Board of Examiners; endorses their action and appreciates the good they have done and are doing, and insists that there shall be no tampering with the present medical law of this State; and be it further

Resolved, That this county medical association urges and calls upon the Trustees of the Medical Society of the State of California to use such funds as may be at their disposal, to employ counsel and to do everything they can to sustain and defend the position in which the State Board of Examiners finds itself at the present juncture; and be it further

Resolved, That we respectfully recommend that similar action be taken by each regular county medical society throughout this State and by the Homeopathic and Eclectic county and State societies for the common defense against suits brought by disgruntled diploma-mill proprietors and their rejected output.

Adopted October 16, 1903, by L. A. Co. Med. Association, C. G. STIVERS, M. D., Secretary.

Dr. H. Bert. Ellis, president of the Medical Society of the State of California, then spoke. He said he was in favor of the resolutions offered, and promised to use his best efforts in behalf of the medical defense fund.

Dr. F. C. E. Mattison, one of the Trustees of the State Medical Society, said he was not in a position to say how much money was available for the use of the medical defense fund, but was sure that there would no doubt be a favorable sentiment toward using such funds if necessary for the purpose of defending any suit brought against the Board of Medical Examiners.

The subject was discussed by other members, and at the close of the discussion, Drs. Buell and Thorpe thanked the Association for its expressions of willingness to support the Board of Examiners in its efforts to maintain the dignity and high standing of the medical profession in California.

The doctors of the south want to see the transactions of their medical societies printed in the STATE JOURNAL. I will keep you posted on all matters of interest.

C. G. STIVERS, Sec'y.

Mendocino County.

In response to an invitation sent out by the Board of Trustees of the State Society, a number of physicians of Mendocino County met Drs. Kenyon, Morton and Jones at Ukiah on the night of the 8th of October, and organized the Mendocino County Medical Society. At the meeting were Drs. E. W. King, J. L. Bond, Ida M. Lathrop, T. P. Hopkins, W. N. Moore and C. A. Poage, and Drs. L. A. Elster, H. Thomson, O. W. Sherwood, A. O. Eckardt and F. C. Piersol wrote that they could not attend, but would like to be enrolled as charter members. Dr. Kenyon, chairman of the Board of Trustees, called the meet-

porary chairman. After considering the matter of organization, it was by vote decided to organize a county society to affiliate with the State Society, and the question of constitution and by-laws was called up. The constitution and by-laws recommended for county societies by the American Medical Association was taken up and carefully read, and then so amended as to conform to the local requirements and the constitution and by-laws of the State Society. It was then adopted. The roster is to be left open to all physicians of the county to become charter members until the next meeting, which will be held on the third Saturday of January, at 8 P. M., at the office of Dr. Lathrop. After this time the initiation fee will be \$5.00; the annual dues were fixed at \$2.00, and the meetings are to be held quarterly, on the third Saturday of January, April, July and October. The constitution and by-laws having been adopted, the Society proceeded to elect officers to hold office until the January meeting, which is declared the annual meeting for election of officers. Dr. E. W. King was elected president, Dr. W. N. Moore, vice-president, and Dr. C. A. Poage, secretary. On motion, the secretary was instructed to at once apply to the State Society for affiliation. On motion the Society adjourned to meet at the office of Dr. Lathrop, who kindly invited the members to meet with her and after the meeting to partake of her hospitality, at 8 P. M., of the third Saturday in January.

The JOURNAL wishes the newly formed county society every success; may it live for all time; may it thrive until every reputable practitioner in the county is enrolled upon its roster; may it create a spirit of abiding peace and good will; may its meetings be conducive to the betterment of everything professional, scientific and personal in Mendocino county, and may it be a strong member of the State Society forever!

Orange County.

The Orange County Medical Association met in regular session Tuesday evening Oct. 6. Dr. H. W. Hasson read a very interesting paper, subject "Medical and Surgical Hints." He advised against the use of alcohol in shock, which, of course, was criticised by some, and favored by others. I am inclined to think physicians view the subject largely in sympathy with their views on prohibition.

The Society took definite action to secure book cases for our library, which I think will be in place in another month. H. S. GORDON, Sec'y.

Northern California and Southern Oregon Medical Association.

Physicians met at Cedarville, Cal., August 28, and organized this association, with the following officers: Dr. Herbert T. Risdon, Alturas, Cal., president; Dr. R. E. Lee Steiner, Lakeview, Ore., vice-president; Dr. Hilderbrand, Cedarville, Cal., secretary, and Dr. Alexander Gibson, Alturas, Cal., treasurer.

Sacramento County.

The Sacramento Society for Medical Improvement met in regular session at the office of Dr. Krull on the evening of October 20. The meeting was called to order by the president, Dr. Thomas Ross. The following members answered the roll call: Doctors W. E. Briggs, Cartwright, Hanna, Hart, Hatch, Henderson, James, Krull, McGavren, McKee, Lindsay, Nourse, Parkinson, Ross, G. L. Simmons, Sutliff, Strader, Twitchell, John White, Wright and Jessie Wheeler.

A committee recommended by the Northern District Medical Society to act as a committee of arrangements for the coming session of the Northern District Society was appointed. The committee is composed of Drs. Henderson, S. E. Simmons, McGavren, Parkinson and Ross.

A communication from the secretary of the National Auxiliary and Legislative Committee of the American Medical Association, addressed to Dr. G. L. Simmons, was read, confirming his appointment by the Sacramento Society and detailing the duties and obligations of the office.

Dr. Twitchell reported additional history on a case he had reported about one year ago. The individual was a young man who then had complete hysterical paralysis, but eventually recovered. Lately he received a blow on the hip, which was followed by paralysis of both lower limbs, also of a hysterical character.

Dr. Sutliff reported the case of a man who was found apparently unconscious in a bath tub. Examination revealed normal color, normal pulse and respiration. A hypodermic injection of aromatic spts. of ammonia quickly restored the patient; he vomited a large amount of undigested matter.

Dr. Twitchell, who also saw him, thought the patient was suffering from acquired hysteria. The wife of the patient has been a long sufferer from repeated hysterical attacks, and her husband has presumably unconsciously simulated her condition.

The paper of the evening was read by Dr. Krull, on "Fracture of the Hip." The discussion was opened by Dr. Henderson, and partaken in by Drs. Hatch, Twitchell, G. L. Simmons and Ross.

J. W. JAMES, Secretary.

San Diego County.

At the regular meetings of the San Diego County Medical Society for the months of September and October, Dr. Magee, the secretary, gave a synopsis of the Lane lectures of this year delivered at the Cooper Medical College by Dr. Allis on "Fractures and Dislocations." These reports took the place of the customary papers and discussions.

San Francisco County.

Meeting called to order at 8:30. Dr. Kengla in the chair. Minutes of last meeting read and approved. Propositions for membership: F. Lehnhoff Wyld, J. V. Hughes, F. P. Gray, R. R. Bullock, Edw. L. Perault, J. F. Presley. Report of Committee on Admissions: Rachael Ash, Kate I. Brady, Wm. H. Heinzman, Laurence R. Draper, A. P. O'Brien, C. A. Bessen, Anson R. Hall, W. A. Meirdierks, O. W. Jones.

Written Communications: (1) "Kidney Tumors of Adrenal Origin," Dr. H. C. Moffitt; (2) "Grawitz' Tumor of Kidney," Dr. E. O. Jellinek; (3) Presentation of a Specimen of Adrenal Tumor, Dr. H. B. Reynolds; (4) "Retro-peritoneal Lipoma," Dr. C. G. Levi-son.

Discussion:—Papers of Dr. Jellinek and Dr. Moffitt.

Presentation of specimen by Dr. Reynolds saying: "This is a tumor that was diagnosed post mortem as an adrenal tumor. Man, aged 56, Nova Scotia, occupation carpenter. Hereditary and childhood history negative with regard to tumor. He came under the service of Dr. Bazet at the French Hospital in April, complaining of pain in the left side. He had been under Dr. Bazet's treatment for an indefinite malaria lasting over 16 years. Then an acute malaria followed, and since then there has been an indefinite history of malaria. He complained of pain and a tumor on the left side. The tumor was thought to be an enlarged spleen, and the pain slowly diminished. He returned to the hospital on July 14th, two weeks after having had a large timber fall on his shoulder. He was able to work after that and continued for five days. Then

he suffered from dyspnea. He was a large-framed-muscular man. The skin was hot, yellow and markedly anemic; not the simple pallor of anemia, but rather muddy and slightly yellowish. The thorax on the left side showed some roughened breathing. His abdomen was rather large and round. There was some tenderness still remaining over the tumor, but it was indefinite. The tumor, as far as could be made out, was in the left hypochondrium 5 cm. below the left border of the ribs. There was no tympany over the tumor. The edge of the spleen could not be felt. Urine normal. Blood examination showed 4,500,000 reds, hemoglobin 65 per cent. The patient was seen by Dr. Kerr and operation decided upon. The right pleural cavity was aspirated and contained thickened blood. This was repeated several times and finally the right thorax was opened and washed out with hot salt solution. Then the fluid did not recur. The patient recovered but continued to become more anemic. The red cells and hemoglobin continued to diminish. The patient died about three weeks ago. At autopsy this tumor was found. As the body was opened the tumor was cut down upon on making an incision parallel to the border of the ribs. The tumor was covered with the omentum gastro hepaticum. On cutting through that the tumor was exposed, showing it to be retroperitoneal. In front was the pancreas which came across or directly over it and the spleen which lay on the left side. The tumor was easily movable about a point which represented a suprarenal diaphragmatic ligament. The kidney was displaced downward and not involved in the tumor mass. Between the tumor and the kidney there was considerable tissue which has been subjected to examination. The tumor looked like a suprarenal tissue. On cutting it contained thick, dark blood.

In discussing Dr. Jellinek's case, Dr. Ophüls said: "The tumor shows the typical lobulated appearance and light color and soft consistency. It has grown from the upper pole of the kidney into the pelvis. It is full of hemorrhagic areas. The tumors develop slowly and may produce metastasis in the veins. The fat is probably a deposit of normal adrenal fat. The microscopic sections show a mesh work of capillaries and in places many large cells are arranged in rows of irregular trabeculae. In fresh sections we find large quantities of glycogen. There are two points that are of interest to the pathologist: 1st, Conheim's theory of hypertrophy of displaced portions; and 2d, non-malignancy of the metastasis.

Dr. Rosenstirn reported a case of Grawitz tumor in a young man of 18, which he considered as very uncommon, as they generally occur after 40. He objected to Dr. Jellinek's statement that these cases were quoted as carcinoma. The origin of the adrenal tumors is indefinite; being of epithelial origin we have the first conditions for carcinoma. He believed that one should not open the fatty capsule, but extract the tumor entire.

Dr. Ebricht reported the results of his microscopic examination of Dr. Reynold's tumor and the metastasis of the spleen, which he said were even more rapidly growing than the tumor.

Dr. Krotoszyner referred to ureteral catheterization of the kidneys and tryoscopy as aids in diagnosis of these tumors. In one of Jellinek's cases Dr. Krotoszyner cryoscopized the urine from the separate kidneys. The blood showed 0.55 and 0.56, 0.58 being normal. On the right side, which was affected, 0.4, which was very low, was found. The cryoscopy showed on the affected side 0.25, against 0.28 on the healthy side. He said that a great complaint that is made in the majority of cases is that the diagnosis is made either too late for operation or too late for the strength of the patient, the patient being so emaciated that no operation can be performed. This, he said, can be overcome by the early segregation and collection of urine from both kidneys.

Dr. Tait mentioned the experimental work that had been done on dogs regarding the origin of suprarenal tumors. In one case a suprarenal grafted into a dog underwent fatty degeneration, the other cystic degeneration, both characteristics of suprarenal tumors. He also stated that the presence of glycogen is not significant of adrenal tumors.

Dr. Cooper referred to the circulatory disturbances caused by these tumors in the abdomen. Tumors on the left side are difficult to distinguish from splenic enlargement. The characteristic displacement of the heart in the latter cases might help to clear up the diagnosis. Inflation of the stomach and its relation when displaced by a tumor might help to give some information. He made experiments on rabbits with the urine of both cases and the results, as far as they refer to an expected variation in blood pressure, remain negative.

Dr. Moffitt, in closing the discussion, said: "These tumors occur quite frequently, even in young children, and varicocele is not infrequent. Drainage will not effect a cure. In regard to inflation of the stomach, I regard that point well taken. Adhesions produced by a tumor in the abdomen may cause displacement of the organs. The lateral veins may rise from the tumor almost anywhere in the abdomen. The flow of blood is oftentimes, in these cases, upward, so that a slight tumor of the adrenal would hardly give rise to veins enough to help us in actual clinical work."

Dr. Jellinek: "We never know when the Grawitz begins to grow, and these tumors may be carried on to autopsy. Grawitz tumors are not very well known, and microscopic examination would reveal their character. In regard to operation, drainage is dangerous on account of hemorrhage.

Dr. Ophüls: "With regard to Dr. Rosenstirn's remarks, these tumors are certainly malignant when they form metastases. Nevertheless on microscopic examination of these latter only little evidence of malignancy is found. Regarding Dr. Tait's remarks concerning the percentage of glycogen, it is well known that all malignant and benign growths contain it, but the proportion of it in adrenal growths is very large.

The Committee on Nominations appointed last month submitted the following nominations: President, J. Rosenstirn; 1st vice-president, E. M. Bixby; 2nd vice-president, H. B. Reynolds; secretary, W. F. Barbat; assistant secretary, H. E. Alderson; treasurer, F. R. Dray; librarian, W. I. Terry. Trustees: H. Gibbons, Jr., W. W. Kerr, L. L. Dorr. Committee on Admissions: S. J. Hunkin, W. B. F. Wakefield, A. W. Morton, J. W. Shields, A. H. Taylor. Committee on Ethics: P. K. Brown, E. Rixford, H. D'Arcy Power, D. A. Stapler, B. D. Cohn. Committee on Finance: E. L. Wemple, E. B. McKee, M. Krotoszyner. Committee on Library: W. I. Terry, C. M. Cooper, C. Quinan. Executive Committee: L. W. Allen, G. E. Ebricht, H. Brunn. Committee on Public Health: H. A. L. Ryfkogel, W. A. Martin, E. S. Merritt, J. M. Williamson. Delegates: F. B. Carpenter, A. B. Grosse, W. F. Southard, G. B. Somers, J. A. Black, L. A. Kengla, C. G. Levison, E. G. Frisbie. Alternate Delegates: F. G. Burrows, K. Pischel, J. M. Moss, M. O. Austin, H. C. Moffitt, Mary Halton, J. G. McChesney, R. L. Rigdon, L. Newmark, B. A. Kugeler, George Goodfellow, M. E. Kibbe, G. M. Barrett, G. L. Eaton, W. R. P. Clark, C. H. Rosenthal.

Respectfully submitted: George H. Evans, chairman; A. H. Taylor, H. A. L. Ryfkogel, J. Henry Barbat.

Meeting adjourned 10:40 p. m.

W. F. BARBAT, Secretary.

Shasta County.

On Sunday, October 11, at 8 P. M., at Hotel Lorenz parlor, Redding, a permanent organization of the Shasta County Medical Society was effected.

Dr. O. J. Lawry, Redding, was elected president; Dr. R. F. Wallace, Redding, secretary; Dr. Charles W. Harper, Redding, treasurer; board of trustees, Dr. B. E. Stevenson, Redding, Dr. C. W. Bryant, Redding, and Dr. L. J. Tabler, Anderson.

The roster as at present composed consists of Dr. O. J. Lawry, Dr. Charles W. Harper, Dr. C. W. Bryant, Dr. J. M. Read, Dr. B. E. Stevenson, Dr. J. T. Rhom, Dr. R. F. Wallace, Redding; Dr. L. J. Tabler, Anderson; Dr. A. B. Gilliland, Cottonwood; Dr. M. D. Pratt, Fall River Mills; Dr. E. H. Pitts, Corning, Tehama Co.; Dr. David B. Fields, Dr. Edward Taylor, Weaverville, Trinity Co.

The society will meet quarterly, on the third Saturday of October, January, April and July, at 8 P. M. Roster to remain open until after the meeting in January.

The objects of our Society are the advancement and cultivation of medical science; promotion of the interests of the medical profession; affiliation with the medical society of the state of California, and eligibility to membership in the American Medical Association.

The meeting was enthusiastic and interesting. Dr. A. W. Morton, of San Francisco, one of the Trustees of the State Medical Society, was present and assisted in the organization.

R. F. WALLACE, M. D., Sec'y.

Sonoma County.

The Trustees having previously sent out notices to all the physicians of Sonoma county to attend a meeting for the purpose of organizing a Sonoma County Medical Society, at Santa Rosa on the 21st of October, Drs. Kenyon, Morton and Jones, of the Board of Trustees, met with the physicians of that county and aided them in the organization of their county society. There were present Drs. Stuart, Yates, Shearer, Herrick, Fay, McLeod, Ivancovitch, Meneray, Mallory, Jesse, McMullin, Bonner and Crump, and Drs. Grant and J. E. Maddux had sent word that they could not be present, but wished to heartily endorse the organization. The meeting was called to order by Dr. Kenyon, chairman of the Trustees, who explained the general principles underlying the scheme of organization of the whole profession and the meaning of the reorganization of the profession in this State. Dr. Yates was elected temporary chairman and Dr. Shearer temporary secretary. Dr. Jones presented the constitution and by-laws recommended for county societies, which he read and explained in detail, suggesting that a motion to organize and adopt the constitution and by-laws would be in order. Dr. Jesse moved that the physicians present representing Sonoma county proceed to organize the Sonoma County Medical Society and adopt the constitution and by-laws read. This was unanimously carried, and the details of time for meetings, etc., were then determined. The society is to meet on the second Thursday of each month, the place to be determined by resolution from month to month. The roster is, by resolution, left open until the December meeting for all physicians of the county who desire to do so to become charter members without the payment of an initiation fee. The following officers were elected to act until the December meeting, which is to be the annual meeting, and at which time officers for the ensuing year are to be elected: President, Dr. M. M. Shearer; Vice-President, Dr. Jas. W. Jesse; Secretary, Dr. G. W. Mallory; Treasurer, Dr. A. McG. Stuart. By resolution it was decided to hold the next meeting at Santa Rosa, and a committee consisting of Drs. Mallory and Meneray was appointed to secure some convenient place; the secretary was instructed to send postal card notices to all members and physicians in the county, notifying them of the place selected for the meeting. On motion of Dr. Jesse, the committee on program, consisting of the president, vice-president and secretary, was requested to prepare a scientific program for the next meeting. On motion, the secretary was instructed to write to the secretary of the State Society conveying the information that the Sonoma County Medical Society had been organized and had passed a resolution asking for affiliation with the State Society, and to transmit a copy of the constitution and by-laws adopted, together with a list of officers and members. On motion, the society then adjourned to meet the second Thursday in November.

(The Board of Trustees wishes to extend its congratulations to the newly formed society, and to wish it every possible success and a long and prosperous career. It has started well; may it live well and thrive well; may it very soon have upon its roster the name of every reputable practitioner in the county, and may its influence for the good of the profession and for the welfare of the people of Sonoma county, and for the upbuilding of the whole profession be more and more strongly felt as it grows and prospers.)

Clatsop County, Oregon.

The meetings of this county medical society are held on the first Thursday of each month. At an adjourned meeting held on the 22d of October, the society took up consideration of the case of C. C. Rosenburg, an illegal practitioner.

Dr. Alfred Kinney of our society is in New York, doing special work.

C. A. CORDINER, Secretary.

PERSONAL MENTION.

Dr. J. N. Crump has removed from Pasadena to Santa Rosa.

Dr. Smith McMullin has succeeded to the practice of Dr. C. E. Reed at Petaluma.

Dr. Benjamin A. Plant, physician at the State Penitentiary, Folsom, has resigned.

Dr. Calvin W. Knowles has returned to San Francisco from his summer residence in San Rafael.

Dr. John L. Kirkpatrick of Los Angeles and Miss Maude Smith of the same city, were married on September 30.

Dr. James P. Dunn, Oakland, has been appointed chief surgeon of the Southern Pacific Railway in Alameda County.

Dr. Charles E. Turner, Vallejo, has been elected secretary of the local board of health, vice Dr. Walter D. Anderson, deceased.

Drs. Edward Henderson, Isaac N. Hughey and Thomas J. Wilson have been appointed members of the Pomona Board of Health.

Dr. August Greth (Med. Dept. U. C. '94) has become a rival of Santos Dumont by constructing an airship that keeps aloft for some time.

Dr. O. W. Steinwand has been elected secretary of the Board of Health of Selma, which carries with it the position of health officer.

Dr. Joseph W. Henry, for many years resident physician St. Mary's Hospital, and Miss Louise English, were married at St. Mary's Cathedral on Wednesday morning, October 7.

Mail intended for the officers or inmates of the Alameda County Infirmary should be addressed in the future to San Leandro R. F. D., instead of Haywards R. F. D. No. 2, as heretofore.

Dr. William G. Murphy, lately interne at St. Mary's Hospital, made a round trip as ship's surgeon on the Coptic and has returned to resume practice, having opened an office at Third and Harrison streets, San Francisco.

Recent removals of San Francisco physicians:—H. A. Andrews to 3402 Twenty-fourth Street; L. M. F. Wanzer to 1220 Geary; A. F. Werner to 1797 McAllister; A. P. Woodward to 212 Haight; W. P. Willard to 1207 Sutter; A. A. D'Ancona to 1022 Sutter; B. F. Fleming to 2103 Pine; Francis Williams to 1392 Haight; Walter B. Coffey (residence) 1502 McAllister; R. L. Porter to 813 Sutter; R. C. Meyers to Russ House; Max Rothschild to 1312 Van Ness; J. W. Key to Fillmore and McAllister; H. Brunn to 1312 Van Ness; C. Phipps to 1496 Fulton; C. N. Ellinwood to Pacific and Devisadero.

Dr. F. M. Jeffries recently reported a rather unusual and interesting fact to the Clinical Society of the New York Polyclinic. A canary bird developed a growth over one eye; it was removed and on section found to be sarcoma. Subsequently recurrence was noted and the bird was exposed to the action of the X-rays for from two to ten minutes daily. The treatment lasted about five months and thus far the growth, which disappeared under this treatment, has not recurred.

PUBLICATIONS.

The Annals of Surgery for August, in addition to several other and very excellent articles, contains a most valuable contribution to the anatomy of the head. "The Anatomy of the Inferior Ethmoidal Turbinate Bone with Particular Reference to Cell Formation; Surgical Importance of Such Ethmoid Cells," by Dr. Howard A. Lathrop, of Boston, is the title of the paper in question. It is amply illustrated with excellent half-tones, and the illustrations are such as to elucidate the text.

Trade "Literature."—An excellent sample of the sort of advertising circular sent out in hundreds of thousands every week to physicians of the United States, has been received. The article advertised is of no particular importance except as an example. The circular first gives the chemical name of the drug (one of the excessively numerous German immigrants, not recognized in Germany, but manufactured for American consumption) and follows it with a statement of the many truly wonderful actions of this particular chemical in a number of affections. It then states the solubility, etc., and follows this with a number of very fine "ready-made" prescriptions, indicated in the conditions noted. The circular closes with the statement that "literature" and samples will be sent free on application, following which is a list of the "literature." The fact mentioned by a correspondent in this issue of the JOURNAL, that it is very easy to obtain all sorts of endorsements for such trash from sundry German "professors" and others, is suggestively indicated by a careful perusal of this list of available "literature." There are twenty-one pieces of it which any physician may have sent to him, if he so desires, and of the twenty-one but one is indicated as having been published in an American journal. The author has a decidedly German name, and the journal publishing it is one of the small and insignificant ones that live and thrive only on the paid articles published and the write-ups, or "reading notices," which it prints. In all probability it is either reprinted from some foreign publication or has been bought by the manufacturers from some German "professor" and published at advertising rates.

Decapsulation of the Kidney.—Drs. Tyson and Frazier report an operation of decapsulation of the kidney (Edebohl's operation) in the *Univ. Penna. Bulletin* for September. The patient was a child of 9, suffering from chronic parenchymatous nephritis; the urine, before operation, was 21 ounces for the 24 hours, one-half, by volume, being albumen. All medical treatment unavailing; ascites persistent and recurring; patient considered hopeless and referred to surgical ward. Patient so weak that it was thought impossible to operate on both kidneys, so one was first operated upon. The second 24 hours after the decapsulation the urine rose to 42 ounces; the third to 73, and the fourth to 102 ounces. It then dropped back to an average of 60 ounces daily. Two months later the other kidney was similarly operated upon. The urine remains at about 60 ounces and the albumen contained is about 50 per cent by volume. The report refers to the work upon dogs done by Dr. Harold A. Johnson, of San Francisco, and closes with the significant sentence: "On the other hand, there can be no doubt that the patient's life has been saved, and apart from the urinary evidences, she is seemingly in perfect health."

A Real Question of Ethics—The *Illinois Medical Journal*, the publication of the Illinois State Medical Society, publishes the report of a committee of the Illinois Pharmaceutical Association which deals with the relations of pharmacist to physician, and says: "It is of particular interest to our members." It should be of particular interest to every physician in every State and Territory of this country. The report is here printed almost entire:

A short time ago some 50 druggists of Hyde Park gave a banquet to which one hundred doctors were invited; the object was to establish more cordial relations. The subjects under discussion were mainly such as had been presented at a meeting of pharmacists at Springfield some two years previously, and were discussed with much interest. The subjects are here briefly outlined, the train of thought in each instance being simply started:

Self Dispensing; Advantages and Disadvantages—Saving of time; economy to the patient. Making the case fit the remedy and not the remedy fit the case. Narrowing of the number of remedies at command. Substitution of the remedy at hand for some other which better judgment would dictate, etc.

Tablet Triturate Evil—All the above evils, plus uncertainty of medication, etc.

Prescribing Proprietary Preparations—Lack of knowledge as to constituents. Popularizing (advertising to the public) to the palpable disadvantage of the physician. Placing heavy financial burden on both pharmacist and patient. (Notably true in such instances as phenacetin, wool fat, the hexamethylene tetramins, etc.).

Prescribing National Formulary Preparations—Something the druggist can make and the physician can know all about; in other words, generally and universally standard preparations. A prominent druggist had on exhibition a number of preparations of this sort, furnishing a striking illustration of their superiority over proprietary preparations, both from a commercial and an ethical point of view.

Phenacetin vs. Acetanilid—Educate the physician to the fact that they are almost identical, with the advantage, medicinally, in favor of acetanilid—let him know that you oppose phenacetin because it is a monopoly and costs twenty times what it should.

Anti-Kamnia vs. Acetanilid Compound—Comment is superfluous.

Counter Prescribing—Its Advantages—If any, to the druggist; its injustice to the physician; its injustice to the patient.

Refilling Prescriptions and giving Copies—Have an understanding with your physician that his wishes when expressed will be regarded.

The foregoing subjects cover practically the entire range of common ground between the physician and the druggist and afford a prolific and profitable field for exploration and coöperation along the lines followed by the Hyde Park druggists. While it should be our aim to discourage so far as possible the prescribing of proprietary preparations, yet so long as doctors prescribe them, let us fill such prescriptions with the genuine article.

Whose fault is it that the secret proprietary preparation thrives, increases and multiplies?

Nurses' Guide to Surgical Bandaging and Dressings, by Wm. Johnson Smith, F. R. C. S., issued by the J. B. Lippincott Company, Philadelphia. Price 75 cents.

This little volume is well gotten up and is of a nice size for the purpose intended—a volume of suggestion and instruction that may be carried in the pocket of the student or nurse while on duty. The preface seems to tell the truth regarding the volume; a characteristic and peculiar rarity: "In writing

this small work the author has endeavored to provide a ready and complete pocket reference book for junior students and nurses in surgical work. The scientific principles upon which the modern treatment of wounds is based, are fully explained, so that the instructions in dressings and bandaging may be intelligently followed. In order to make these explanations as clear as possible, the little book has been profusely illustrated." The illustrations are really descriptive.—P. M. J.

The American Journal of Orthopedic Surgery, to be published by the American Orthopedic Association, has issued its first number. The Journal is to be a quarterly, and will contain the papers presented at the meeting of the Association and other papers on Orthopedic Surgery by members and non-members. A strong feature is to be a complete resume of orthopedic literature, so that each year's volume shall contain the whole of the year's literature in full or in abstract.

The Journal is to be published in Boston, and is under the charge of an Editorial Committee consisting of Robert W. Lovitt, of Boston; B. E. McKenzie, of Toronto, and Harry M. Sherman, of San Francisco.

The present number contains articles by L. A. Weigel, the president at the time of the meeting, on "The Family Physician, the Specialist and the Patient." V. P. Gibney, "The Correction of Deformity at the Hip, the Result of Disease: A study of the Best Methods and Best Positions"; E. H. Bradford, "Subtrochanteric Osteotomy in Adults, in Adolescents and in Young Children;" R. Tunstall Taylor, "The Mechanical vs. Operative Treatment of Rachitic Deformities of the Lower Extremities, Presenting a New Osteoclast"; Wallace Blanchard, "The Surgical Pathology of Genu Varum and Genu Valgum;" R. W. Lovett, "The Occurrence of Painful Affections of the Feet Among Trained Nurses"; W. Barton Hopkins, "A Further Consideration of a Modified Form of Osteotomy Combined with Osteoclasis, Osteotomoclasis"; Joel E. Goldthwait, "A Consideration of the 'Round Shoulder' or 'Stoop-shoulder' Deformity in Children, with Especial Reference to the Proper Adjustment of the Clothing in Preventing and Treating Such Conditions"; W. R. Townsend, "The Abuse of Flatfoot Supports," and Royal Whitman, "The Importance of Supplementing Tendon Transplantation in the Treatment of Paralytic Talipes by other Procedures Designed to Assure Stability."

In this number are twenty-two abstracts of orthopedic papers. In its make-up the Journal shows excellent taste and good mechanical work.

The Alumni Bulletin of the University of California Medical Department begins its second year with a very creditable number. Judging of its usefulness by its material, it is evident that the "Bulletin" is accomplishing much. The number is full of reports of addresses at the meetings of the Alumni Association and of communications from members, all concerning the interest the Association should have and must have in the Medical Department and its welfare and growth. Not a few of the expressions are critical, and that is healthy, for it, too, shows interest. The scientific papers are few and brief, but the "Bulletin's" first object is to bring the individual alumni in touch with each other through the medium of its publication, and when the Association has become stronger, as it must with the continuation of its present course, we shall expect to see the scientific work of its members reported in its pages.

The *Boston Medical and Surgical Journal*, in its issues for September 17 and 24, and October 1, publishes "The Ill Health of Francis Parkman," by Dr. Geo. M. Gould. This essay is a further addition to the studies which Dr. Gould has been making for some time past, one volume of these Biographic Clinics having already been published and reviewed in these pages. Whether or not we agree with Dr. Gould in believing that eye-strain has such an important place in the formation or malformation of character, and indeed, physical development, we must concede that he has shown a masterful study of his subject, a delightful erudition and a keen reasoning faculty that cannot but gain at once our admiration. In these days few pieces of work are so well or so carefully done as they should be, and it is an added joy to see such clean-cut work come from such a busy workshop. There seems to be little doubt that Dr. Gould has demonstrated his point to at least a considerable extent, and that he has shown to be true, within reasonable margin for question, the fact that eye-strain does materially affect a man's working faculties and his output. Also that eye-strain has existed and may exist for years, if not for a generation, without being located as the cause of trouble and properly attended to, will have to be conceded to his logic. Dr. Gould is an extremist, but then, are not extremists sometimes in the right and conservatives in the wrong? It is to be hoped that the essay last published will be issued in pamphlet form so that a more careful study may be made with the whole of the material he has presented.

The October issue of the *International Journal of Surgery* is one of very great interest to those who practice or may be pursuing the study of radio-therapeutics. The number contains papers, profusely illustrated, by leading electrotherapists, which very fully cover the field of this comparatively new medical science. Among the titles are "Treatment of Cancer," "Cure of Lupus Erythematosus by Actinic Light," "Therapeutic Value of the X-Ray," "How to Secure the Best Skiagrams," "New Treatment of Cicatrices," etc.

Reclamation of Alkali Land at Fresno, California, by Milton Whitney, Chief of the Bureau of Soils, Department of Agriculture.

Proceedings of the Good Roads Convention, held at St. Louis, Mo., April 27th to 29th, 1903. Department of Agriculture.

Proceedings of the Fifth and Sixth Annual Meetings of the Pharmaceutical Association of the State University of Iowa, held at Iowa City, April 3rd, 1901, and April 1st, 1902.

History of Maritime Quarantine in Louisiana Against Yellow Fever. By Dr. Quitman Kohnke.

DEATHS.

Dr. J. G. Neal died at Santa Rosa on October 11, of septicemia, which followed an operation on an abscess of some years existence. Dr. Neal was a native of Kentucky and had practiced his profession in Sonoma county for six years.

Dr. George W. Carpenter died October 3, at his residence in San Francisco, 1422 Post street, in the 80th year of his age. He was born in Indiana and graduated from Medical Department University of Michigan in 1853.

Dr. L. C. Winsor, who removed from San Jose to Livermore a few months ago, died on October 22d at his home, of consumption. Some years ago Dr. Winsor was connected with the county hospital at Denver, Colo. He was 41 years of age.

UNAUTHORIZED USE OF REPRINTS.

New York, August 18, 1903.

To the Editor:—My attention has been called to a reprint of my article on "Anesthol" (which appeared in the *Journal* February 28 and March 7, 1903), made and circulated by Messrs. Lehn & Fink, a wholesale drug firm of New York. These reprints were made entirely without my knowledge. I promptly wrote to Messrs. Lehn & Fink, asking for an explanation. The answer I received from them was most unsatisfactory, carefully avoiding the point at issue: "Lack of my (the author's) consent for making the reprints," and not even offering an apology for their conduct.

I can but protest against the method adopted by this firm, viz., using a scientific article for commercial purposes without securing the writer's consent prior to their doing so. I need not assure you that had they asked me beforehand I would have refused their proposition most emphatically. Is there no way of protecting a professional man against such abuses?

WILLY MEYER.

Note—Everything printed in the *Journal of the American Medical Association* is copyrighted, and no one has a right to reprint any of its contents without permission, consequently Lehn & Fink are liable to prosecution for violating the copyright laws. It is to prevent just such occurrences as this that the *Journal* goes to the expense of copyrighting all of its contents, and such a violation of law and the rights and privileges of others, we are happy to say, seldom occurs.—*Journal A. M. A.*

(Will the *Journal A. M. A.* be good enough to advise us whether Lehn & Fink have been prosecuted for their infraction of the law?—Ed.)

NEW PHYSIOLOGICAL LABORATORY OF THE UNIVERSITY.

On August 20th, the new laboratory was dedicated at Berkeley. The dedicatory address was delivered by Professor Wilhelm Ostwald of Leipzig, whose subject was "The Relation of Biology to the Neighboring Sciences." Professor Jacques Loeb spoke on "The Limitations of Biological Research."

The laboratory was built through the generosity of Mr. Rudolph Spreckels of San Francisco and was equipped by Mr. Spreckels and Dr. Herzstein. The laboratory consists of a central building and two wings. The left wing is devoted exclusively to the use of students. A large lecture-room and two well-lighted laboratories afford ample accommodations. The right wing is occupied by the aquarium, engine room, thermostat room, and a number of small rooms for research work. The central building is devoted entirely to the use of instructors and investigators. Besides the private rooms, a large number of which are located on each floor, there are several which are devoted to more general ends. On the lower floor are a large store room for apparatus, a balance room, a galvanometer room, a microscopical room, and the library of the department. On the second floor are a dark room and the rooms for physics and chemistry. The staff consists of Professor Loeb and Drs. Fischer, Bancroft, MacCallum, Bullot and Rogers.

CONGRESS OF OPHTHALMOLOGY.

The next International Congress of Ophthalmology will be held at Lucerne, Switzerland, on September 19th, 20th and 21st, 1904. A radical change in medi-

cal congresses is to be introduced, and the plan promises to remove the great objection to such meetings—the long, tiresome papers on subjects about which it is to be assumed every person in attendance is well informed. All those intending to present papers at the Congress must send them in to the committee before the 1st of May, 1904. The committee will then go over them, and such as are accepted will be printed. This volume of printed papers will be sent in advance of the meeting to each person who has paid his fee. At the time of the meeting these papers will not be read, but they will be discussed. In this way the matter of the paper is presented to all, they may read it at leisure, and they can come to the Congress fully prepared to intelligently discuss the questions presented by the writer. "We thus hope to hear the opinions of experienced men who have not the time to write and publish their experiences and opinions. The discussions will be printed and will form the second part of the official report which will be sent to each member after the close of the Congress."

"We propose only one official subject to determine which the great authority of a Congress appears to be particularly necessary. Subject: To settle the question of indemnity as regards the value of an eye, lost or injured." Profs. Axenfeld (of Freiburg), Suizer (of Paris) and Wurdemann (of Milwaukee) are to draw up a report on this subject, which will be the first thing discussed. The correspondent of the Congress for the United States is Dr. Geo. De Schweinitz, 1401 Locust street, Philadelphia, and from him any further information may be secured.

Pure Food Law is Working.—Dr. Wiley, Chief of the Bureau of Chemistry, stated recently that of 205 cargoes of imported food inspected by his bureau since the law authorizing the exclusion of impure foods went into effect on July 1st last, 20 samples, or 10 per cent, has been found to come within the law's inhibition, and had been condemned. Of these 20 samples 5 were Rhine wine containing salicylic acid, 2 white wines containing sulphurous acid, 4 olive oil containing cotton-seed oil and being misbranded, 3 frankfurter sausage containing preservatives injurious to health, 4 canned vegetables covered with lead tops in contact with the food, 1 vinegar which was misbranded and made of distilled alcohol, and 1 of coloring matter for foods, coal-tar dyes being used. Of the remaining 185 cargoes 167 have been released and 18 are still under examination. The owners of some of the condemned cargoes have asked for time to present additional proof of purity, and it has been granted. Professor George F. Colby, of the University of California, has been appointed by the Secretary of Agriculture to make examination of foreign food products received at Pacific Coast ports. The purpose of the appointment is to avoid the expenses of shipping goods across the continent for inspection.

To Properly Educate Children—Ella Wheeler Wilcox advocates the education of children before they are born. The curriculum does not include the higher mathematics, but is nevertheless important and extensive. Expectant mothers, says Mrs. Wilcox, should spend the period of their gestation in art galleries, academies of design, musical emporia and in colleges where hygiene and dietetics are expounded along strictly scientific lines. Above all, expectant mothers should be protected from the usual irritating and antagonizing influences of relatives.—*Col. Med. Journal.*

DEPARTMENT OF MATERIA MEDICA, THERAPEUTICS AND PHARMACY.

SYNONYMS.

"Things which are equal to the same thing are equal to each other."

Few physicians know that many of the "new remedies" marketed under fanciful trade names are identical with remedies having dissimilar names, or are old preparations which have been given fancy names in order to create a false market for the thing in question. For the benefit of physicians and pharmacists the following table has been compiled and will be added to as the requisite information is obtained. The information is secured from chemists and from medical and pharmaceutical journals, and is correct in the main. Should any errors creep in they will be corrected as soon as detected. *Until sufficient evidence to the contrary is forthcoming, it must be assumed that there is no question of substitution involved when the pharmacist supplies a given article under any one of its synonymous names.*

Adeps lane hydrosus.	{ Anasalpin Lanolin Lanum
Bromacetanilid	{ Antiseptin Asepsin
Bismuth-iodo-subgallate	{ Airol Airogen Airoform
Dimethyl-ethyl-carbinol chloral.....	{ Dormiol Amylene-chloral
Dithymol Diiodid	{ Aristol Annidalin Di Thymol Iodid Di Iodo Dithymol (And several other similar names.)
Hexamethylene - tetramine	{ Aminoform Ammonio-formaldehyde Cystogen Formlin Saliformin Urotropin
" , anhydromethylen chloride.....	{ Helmitol
Ortho-ethoxy-ana-mono-benzoyl-amido-chinolin	{ *Benzanalgene *Analgen *Quinalgen
Paraphenetin carbamid	{ Dulcin Sucrol
Phenazon (Br. Pharmacopoeia).....	{ Antipyrin Analgesin Methozin Pyrazin Pyrazolin Paradyn Sedatin
Phenylacetamide	{ Acetanilid Antifebrin (And several hundreds of trade names for headache powders, etc.)
Plant pepsin.....	{ Papain Papoid Papayotin Caroid
Salicylic acid ester of quinine.....	{ Salochinin Saloquinin

*Must be very cautiously used, if at all, for the physiologic action is not fully known, and this chemical is said to have very serious effect upon the heart and nervous system.

Salicylate of Salochinin	Rheumatin
Sodium sulpho-cafeate.	{ Narsol Symphoral
Thyroid gland, dried lactose trituration....	{ Iodothyryne Thyroidin
Trioxymethylen.....	{ Paraformaldehyde Paraform Triformol

Acetyl-salicylic acid=Aspirin.
Aluminum aceto-tartrate=Alsol.
Australian oil Eucalyptus=Flucol.
Bismuth beta-naphtholate=Orphal.
Calcium permanganate=Acerdol.
Chloreton, 1% solution=Aneson.
Creosote carbonat=Creosotal.
Fl. extract Tang-Kui=Eumenol.
Guaiacol carbonate=Duotal.
Magnesium dioxid=Biogen.
Saccharin=Garanotose.
Subgallate of bismuth=Dermatol.
Sodium chlorate=Oxychlorine.
Sodium beta-naphtholate=Microcidin.
Trichloracetic acid, 50% solution=Acetocaustic.

Goods Subject to Test.

To the Editor of the State Journal:—In your recent report of the proceedings of the American Pharmaceutical Association at its Mackinac Island meeting, a slight error occurs in quoting my remarks, which misrepresents the attitude of Messrs. Parke, Davis & Co. toward the products of their competitors. The statement attributed to me is that that house claimed that it was the only one whose goods were absolutely reliable. I could hardly have said so since the manager of the house in question has been very careful in his conversations and correspondence with me relative to the bureau, to disclaim this view. On one occasion, when I intimated that houses took this view, he wrote to me that he deprecated comparisons of the kind, and instructed his representatives to avoid disparaging their competitors and to confine themselves strictly to their own business. It was probably my statement that he admitted that he could not accept the goods of any house on trust as to their quality, nor without subjecting them to rigid tests, that misled you.

H. H. RUSBY, M. D.

New York, October 1, 1903.

Plaster of Paris in Asafoetida.

To the Editor of the State Journal:—The inclosed correspondence, consisting of a letter addressed to me by a widely known house, and my reply to the same, bear directly upon matters that have appeared in your JOURNAL and may be of interest to your readers.

Very truly yours,

C. S. N. HALLBERG, Ph.G., M. D.

Professor Hallberg: Dear Sir—We have recently been informed that you examined a sample of our Powd. Asafoetida and found that it contains 80 per cent of plaster of paris. Will you kindly inform us where you got the sample. If there is any plaster of paris in it it was not put there by us. We buy asafoetida in original cases and if there is any plaster of paris in it it is put there before we get it.

It seems to us that before making such a statement you should have communicated with us on the subject.

Yours truly,

Chicago, Sept. 15, 1903.

Messrs. ———:—Your letter ament an alleged statement by me was duly received. With reference to the allegation, I have never examined any powdered asafoetida for

impurities nor have I ever stated publicly or privately that your powdered asafoetida contained any plaster of paris. Anyone who makes such a statement utters an unqualified falsehood. I have taught for 25 years that powdered asafoetida is comparatively inert and that it should not be used. That in order to get it so friable that it may be powdered, the asafoetida is heated to drive off the greater portion of the volatile oil. Since the oil is the chief active principle it follows that the gum-resin, deprived of the oil, is comparatively inert. This statement cannot be successfully contradicted. I have, however, stated that much of the asafoetida on the market contains plaster of paris and in this I am supported by the authorities. I do remember an article published some 3 or 10 years ago, reporting on the presence of plaster of paris in powdered asafoetida, but do not believe any special make or name of manufacturer was given. To the best of my recollection it was a report on drug adulterations, and I have no doubt it is true now as it was then, for if asafoetida, as imported, contains plaster of paris, then the powdered should also sometime contain plaster of paris, if the drug miller does not examine the crude article and demand that he gets what he pays for. What are the requirements of the U. S. P., that 60 per cent should be soluble in alcohol for?

Since in your letter you appear to take me to task "for not communicating with you on the subject before making such a statement," I desire to remind you that this is not customary when reports are made on the purity or quality of substances. This very proposition was before the American Pharmaceutical Association at its last meeting at Mackinac and was ridiculed by nearly every manufacturing pharmacist represented. "No," they said, "we do not want any supervision in our business; we do not need any outside authority, as is the proposed bureau, to meddle with our affairs. We know how to run our business. Besides, our goods are all good, but there are goods on the market which should be exposed. Such goods are offered at prices at which our goods cannot be furnished. It is dishonest competition and should be ruthlessly exposed. A bureau, on the other hand, organized for the examination of medicines and exposure of the guilty parties will have our moral and financial support, etc., etc."

In other words, the objection presented by manufacturers to the bureau plan is, because it proposes to do just what you desire. It is suggested that you carefully study the bureau plan as proposed. The unintentional, accidental or ignorant adulteration, or even substitution of medicines, especially of crude drugs or their preparations derived from crude substances, often of foreign origin, need not be a subject for criminal prosecution. Prevention is better than cure. A systematic plan for supervision, inspection and reliable information will correct abuses and be of far greater service to the manufacturer than legal proceedings with the inevitable persecutorial aspect and often injustice. Is it just or honest to jeopardize the reputation of a manufacturer through publicity of some lapsus, often not well authenticated, without affording him an opportunity for its correction?

And above all, let us acknowledge that the scientific work, especially that of chemistry, required in the examination of medicines is not such as can be performed by everybody, and that the results are not by any means always "dead sure." I shall be pleased to learn your views on this important question at your earliest convenience.

Very truly,

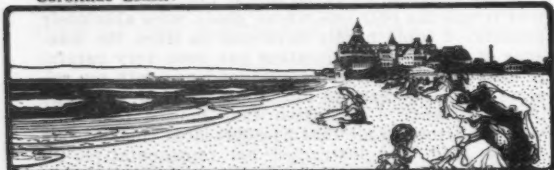
C. S. N. HALLBERG, Ph.G., M. D.

Professor of Pharmacy.

NOTICE.

In order that volumes of the STATE JOURNAL may hereafter begin with the January issue, the present volume will include the December number (No. 13). Those who intend to bind their files will therefore wait until they have received the December number. Index to Volume I will be furnished next month.

Coronado Beach.



California Limited

TO CHICAGO
WITHOUT A JAR

The best train for those
who need care

Santa Fe

X-Rays

Apparatus

The very best complete outfits for either ALTERNATING or DIRECT CURRENT. Give absolute satisfaction.

Tubes

Even if you have apparatus let me quote prices on my improved ADJUSTABLE-VACUUM TUBES—the best to be bought for any money.

Estimates and Prices Very Gladly Quoted

I also manufacture any style of small incandescent lamps, Crookes' tubes and glass apparatus for scientific purposes.

G. E. Lamont

126 Kearny Street - San Francisco, Calif.

TELEPHONE RED 4143